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# East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

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10 May 1985

## EAST EUROPE REPORT

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INTERNATIONAL AFFAIRS

CEMA COUNTRIES ENVISION INCREASED TRADE WITH MEXICO

Warsaw RYNKI ZAGRANICZNE in Polish No 11, 24 Jan 85 p 4

[Article by Andrzej Krzemirski]

[Text] The CEMA countries and Mexico have maintained regular economic relations for the last decade, since they signed an agreement in 1975. This document set the framework for trade exchange and a variety of forms of economic and scientific-technical cooperation. A special joint commission has supervised the implementation of this agreement.

Existing economic relations between Mexico and the CEMA countries have been in several fields: engineering, chemical and textile industry, mining, agriculture, food-processing industry, fishing, communications and medical care. The visible effect of this cooperation with the CEMA countries has been the many installations throughout Mexico built with CEMA cooperation. Among others, these include textile and machine-tool factories.

The mutual trade exchange contains a wide list of goods. Mexico has sold to the CEMA countries primarily raw materials (zinc, lead and silver), agricultural products (cotton, coffee, sugar cane), chemical products and others.

The CEMA countries have exported mostly machinery and equipment, fishing boats, tools, sugar and other foodstuffs, alcohol and raw materials.

Among Poland's exports to Mexico, the most important products have been textile machinery, ships, machine tools and vodka.

After the dynamic trade development in the second half of the 1970's, a rapid drop in turnover ensued, caused by the worldwide recession and balance-of-payments problems. In the first half of 1984, the value of this turnover was 71.7 million rubles, which represents a level 50 percent smaller than that of 4 years ago. The positive credit balance held by the CEMA countries 2 years ago has become a deficit that has continued to increase because of increased Mexican exports of coffee and the Mexican Government's recent decision to limit imports.

The economic crisis in Mexico has had a different impact on the exports of the various CEMA countries. Bulgaria and Poland have felt Mexico's payments difficulties most acutely, as their exports have dropped since 1983 to almost zero. At the same time, the Soviet Union and Cuba have seen their exports drop 3 times; the German Democratic Republic, 2 times; Czechoslovakia, 30 percent lower. Only Hungary was able to increase its exports to Mexico, by 10 percent.

There is no doubt that this level of trade turnover, especially after the rapid decline after the beginning of the 1980's, cannot meet the needs of any trading partner. This is why the CEMA countries and Mexico are making a very concerted effort to counteract these unfavorable tendencies. One area drawing increasing attention is countertrade, which has become more and more placed into practice.

In this difficult situation for both sides, initiatives have been adopted to renew direct contacts between the partners and to monitor closely the mutual possibilities and needs for increased turnover. With this in mind, a Mexican trade mission last September and October visited four socialist countries: the German Democratic Republic, Poland, Czechoslovakia, and Hungary.

A special occasion for renewing mutual trade relations was the economic and industrial exhibition of the CEMA countries--CAMEXPO 84. This exhibition was held in November of last year in Mexico City and was the first attempt of its kind by the socialist countries. Participating countries at the exhibition were Bulgaria, Czechoslovakia, Cuba, the German Democratic Republic, Poland, Hungary, and the Soviet Union.

Participants at the exhibition recognized that such occasions play the role of stimulating the development of cooperation between the CEMA countries and Mexico. Immediate trade results are not expected, as both sides know that similar economic and payments problems exist for both sides.

Czechoslovak enterprises have discussed the development of further cooperation in the production of machine tools. Another subject of discussion was the future sale to Mexico of previously sold textile and printing machinery as well as turbines and power engineering equipment that had not been the subject of previous exports.

Producers from the German Democratic Republic also export equipment for the textile and printing industry. These deliveries will be continued and also there are prospects for the sale of microscopes of various types, planetarium equipment, musical instruments and porcelain. The Mexican side also is interested in purchasing flour-milling equipment from the GDR.

Bulgaria will supply Mexico with typewriters, cash registers and machine tools. Among others, negotiations about patents and licenses have taken place concerning the technology of milk and tobacco processing.

Cooperation between the Soviet Union and Mexico will concentrate mostly on building new industrial installations and educating specialists. Also under consideration is the possibility of exporting to Mexico petrochemical equipment and insulators needed to build energy lines.

Hungary counts on the further sale of medical equipment, electric and electronic measuring instruments, lamps, electric light bulbs and medicine. There are possibilities for cooperation in the production of electric light bulbs and medicine. There also were discussions on possible cooperation in the manufacture of buses. The Hungarian side also has attempted cooperation in agriculture, especially in the production of sunflowers. Another area of discussion is the joint printing of books and records in Hungary and Mexico. Very interesting discussions concerned the possible use in Hungary of oil exploration techniques used by Pemex.

On this basis, what are the prospects for closer agricultural cooperation between Mexico and Poland?

Mexico is indeed very interested in bringing about such cooperation with our country. This is shown in the numerous discussions conducted during CAMEXPO 84 as well as in discussions following those made at earlier dates.

These discussions show the interest of the Mexican businessmen in Poland's capital goods. The Mexican businessmen pointed out that Mexico still has an economic crisis, but investment will be continued on a smaller scale.

The negotiations conducted by Polimex-Cekop were very instructive. As a result of this, investment export for the Mexican market will come through local producers of machinery and equipment and also with businesses that conduct construction and assembly. The Mexican authorities also have approved several joint ventures. We think it would also be profitable for our exporters of capital goods to work with well-known Western firms that have trade offices in Mexico. This also could lead to the financing of capital investment undertakings.

There are chances for exchanging experiences and more cooperation for various branches of industry. These proposals are concurrent with accomplishments made at the last Mexican-Polish session, which was held in April 1984.

Our enterprises could have participated in investment ventures with the petrochemical, chemical and sugar industries. There appeared many chances for Kopex to export mining equipment to Mexico.

They are interested not only in our coal mining industry but also in the extraction of phosphorus, sulfur and kaolin [porcelain clay]. Mexico also is interested in Polish life-saving equipment.

There also is a large amount of interest in the export of our machine tools. A few businesses would like to buy our lathes, grinders and universal milling

machinery. There is also interest in a printing press whose construction and work is from an original Polish patent. Besides this equipment offered by Metalexport, there was also interest in the heavy machine tools produced by Rafamet and the molding machinery exported by Centrozap.

Very interesting possibilities could come from eventual cooperation in the production of rolling stock. This would be a new area in Polish-Mexican relations; it would include various sorts of railroad cars, locomotives, urban rapid transit equipment and track machinery.

In contrast to the above-cited Kolmex stock, the textile machinery sold by Befama has been popular for years in Mexico with a very good reputation. Everything points to the fact that after the break in sales caused by the crises, a renewal in sales in the textile industry is coming to the fore. An example is the November 1984 contract for delivery of a carding machine produced in Bielsko-Biala worth \$225,000.

Another sphere of cooperation with great hope is the shipbuilding industry. This has been confirmed in discussions with Centromor and Navimor. Shipbuilding and the textile industry were two areas of interest recognized by both sides in a joint commission.

It also was stated that Mexico would be interested in purchasing agricultural airplanes. Mexico is interested in buying bearings, measuring devices and equipment. Poland's number-one consumer export to Mexico remains vodka, but we should not exclude the sale of fruit products.

Great meaning for our export potential to Mexico took place through symposia offered during CAMEXPO 84. The symposia dealt with mining, production and use of heavy machine tools, shipbuilding and fishing.

For some Polish enterprises, participation at the exhibition in Mexico was the first occasion to present their export offerings to the Mexican market. For others, the exhibition was an opportunity to renew former contacts with Mexican partners, which had become stagnant as a result of exchange and economic problems.

As a result, many Mexican businessmen know first-hand Poland's economic potential and her export possibilities. This is very important for future cooperation between the two countries.

There has been a visible renewal of direct contacts among enterprises between Mexico and the CEMA countries. Serious trade discussions have accompanied the official talks, giving rise to the legal framework for relations between both sides.

During the fifth session of the joint commission, held in November 1984, Mexico was represented by heads of the most important economic ministries and the CEMA countries were represented by deputy ministers of foreign trade. They called for further cooperation in such areas as trade exchange, industry, agriculture, fishing, science, technology and finance. This is a very important step in furthering future relations between the socialist countries and Mexico.

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INTERNATIONAL AFFAIRS

BULGARIAN MINISTER DISCUSSES CURRENT, FUTURE TRADE WITH USSR

Sofia POGLED in Bulgarian 25 Mar 85 pp 1,4,5

[Interview with Khristo Khristov, minister of foreign trade, following a meeting between Bulgarian and Soviet government leaders in Moscow; date and place not specified]

[Text] The present status of Bulgaro-Soviet trade relations. What does 57 percent of the overall trade of our country indicate? Cooperative ventures in production and joint developments in mechanical engineering are taking new directions, toward smooth-running, automated production systems, industrial robots and automated warehouses. Machinery comprises 60 percent of all Bulgarian exports to the USSR. New Soviet goods for the Bulgarian market.

It is always interesting to learn a little more about official announcements. Last week, one such announcement--the meeting between Bulgarian and Soviet government leaders in Moscow--provoked special interest. In that same week, exactly 37 years ago, the first treaty of friendship, cooperation and mutual aid between Bulgaria and the USSR was signed. One of the main items for discussion was how to broaden and improve Bulgaro-Soviet economic, scientific and technological cooperation.

Our questions were answered by the Minister For Foreign Trade, Khristo Khristov, who was a member of our delegation.

[Question] What is the present status of Bulgaro-Soviet trade relations?

[Answer] It is an indisputable fact that the remarkable successes that socialist Bulgaria has enjoyed in social and economic development, and her increased potential for accelerated progress in all spheres of life, would have been unthinkable without the all-encompassing, selfless aid of the Soviet Union. This holds good especially for the ever-increasing participation of our country in the international division of labor. Today the process of accelerated integration of the economies of the two countries is being accomplished through 1990 in accordance with the general plan for specialization and cooperation in material production.

As early as the first trade agreement between the People's Republic of Bulgaria and the USSR, in 1945, 120 varieties of Soviet goods were included while Bulgarian exports to the USSR comprised only 9 goods: tobacco, attar of roses, seeds.... With these supplies, the Soviet Union gave a practical example of its international solidarity, in its most difficult years, and contributed to the normalization of economic life and to the reconstruction of our basic industries.

During the whole 40-year period following the signing of the first agreement, trade relations between our two countries have been characterized by a determination to resolve our country's fundamental problems. For example, reciprocal trading in the long-term trade agreement for the period 1981-1985 has no equivalent in the history of Bulgaro-Soviet economic relations to date. Nor can we draw any analogies in scale and quality with contemporary international relations. It is enough to point out that during the current five-year plan reciprocal trading was projected to reach 52 billion leva. This volume was already met during the first four years. In 1985 alone, reciprocal supplies of goods are projected to reach about 15.8 billion leva. At present, the monetary value of our exports alone is based on a list of over 500 varieties of goods.

Regardless of the impressive quantitative indices of trade development, its significance today is measured increasingly against quality. Greater volumes of trade are developed as a result of integrative processes. These processes are a fundamental factor in the dynamic growth of reciprocal trading, which permanently outstrips the growth of the national income and industrial production in the People's Republic of Bulgaria. This fact provides convincing evidence for the increasing role of foreign trade with the USSR in the fulfilment of our basic socio-economic tasks. A comparison with the planned growth rate of the Bulgarian economy demonstrates that, even in the current five-year plan, trade with the USSR shows the greatest increase. The planned increases for the period 1981-1985 are 25 percent for the national income of the country, 30 to 33 percent for industrial output and 37 percent for trade with the Soviet Union.

The role of trade with the USSR in the economic development of Bulgaria can also be looked at from the point of view of its relationship to the national income of the country. In just the past 14 years, the role of trade with the USSR in the economic development of Bulgaria has increased by a factor of 2.5.

The Soviet Union is unalterably the largest trading partner of the People's Republic of Bulgaria, representing 57 percent of the overall trade of the country. Today, Bulgaria ranks third as a trading partner of the USSR, representing 8 percent of its overall trade.

A characteristic feature in the development of reciprocal trading today is the trend toward conversion of machinery and equipment into leading commodity positions. The import of machinery and equipment from the USSR actively contributes to the modernization, construction and reconstruction of new production capacities of modern technological standard. With Soviet aid, we have rebuilt industrial resources with an overall value of over 10 billion leva. The annual production of industries rebuilt with Soviet aid has



increased. Production of brown coal, rolled iron from ferrous metals, electrical power and knitware has doubled; production of sugar has increased by a factor of 2.5 and production of electric trucks by 35%.

About 65 percent of our supplies of fuel, raw materials and fabrics are supplied by the Soviet Union. During the current five-year plan, the import of raw materials will increase due to our participation in the 11 construction projects built by joint effort on Soviet soil. In the area of raw materials, the construction of joint projects will remain for the future a fundamental form of integration between the People's Republic of Bulgaria and the USSR. In line with economic politics, and to ensure mutually advantageous conditions for an increase in supplies of raw materials and fuels from the USSR, the People's Republic of Bulgaria will expand production of industrial and agricultural goods, food and tobacco, which will compensate the Soviet side for the fuel, energy and raw materials received.

The growing economic potential of the People's Republic of Bulgaria is an important base for expanding the volume and the number of goods exchanged in reciprocal trading. In its turn, through exports to the Soviet Union, our country participates in the fulfilment of important tasks in the national economy.

We are delivering increasing numbers of machines to the Soviet market: about 60 percent of our exports for this type of product. Overall, machinery and equipment also comprises about 60 percent of our exports to the USSR. On the Bulgarian export list there is a wide range of electric trucks and motorized vehicles, metal-working machines, including computerized machines, complete projects, technological lines, transducers and electronic and electrotechnical products.

Our agreements for specialization and cooperation with the USSR are on a large scale. They exert considerable influence on the development of a number of our basic manufacturing processes, mainly in mechanical engineering and electronics. Over two-thirds of Bulgarian exports of machinery and equipment to the USSR fall into the area of specialized goods. Eighty percent of the total specialized export of machinery and equipment from the People's Republic of Bulgaria is destined for the USSR.

In as much as it is able, our country will also take part in the Soviet food program. We are therefore planning an increase in our supplies of equipment for the food and tobacco industry, canning industries, warehouses, etc.

[Question] What new trends are there in Bulgaro-Soviet trade relations? What demands will the scientific and technological revolution make on them?

[Answer] In March 1984 the National Party Conference called for a definite improvement in quality, and this demand has an exceptionally important significance for the development of the external economic ties of the country. It also exerts and will continue to exert a multifaceted influence on our exports to the USSR. The realization of this demand is above all linked to product revision in keeping with the requirements of scientific and technological progress. Progressive changes are being made in our production

structure and in our export, and further changes are imminent. As a priority, we are developing microelectronics, robot construction, production of automotive devices and computer technology for export.

Revision of our list for reciprocal trading will also be based upon scientific and technological integration. In this, a decisive factor will be the practical application of the planned "long-term program for economic, scientific and technological cooperation between our two countries until the year 2000".

Along with the complex program for scientific and technological progress, which is being drawn up by the member countries of CEMA on a multifaceted basis, the long-term program will aid the formation of coordinated, and in some areas uniform scientific and technological politics. Within the framework of the bilateral program for scientific and technological cooperation, the People's Republic of Bulgaria and the USSR will unite in their efforts to create, as a matter of principle, new scientific plans for perfecting the structure of the national economy, for electronic systems and complete automation, for raising productivity, improving technological standards and the quality and competitive edge of our manufactured goods.

After the high-level economic conference, cooperation between Soviet and Bulgarian mechanical engineering factors is intensifying and entering a new stage in its development. The basic form of this cooperation is joint planning and joint production. As a priority, these joint efforts will be directed to technological progress: the creation of smooth-running automated production systems, industrial robots and automated warehouses. With an increase of direct cooperation in production, we shall solve more effectively the problems of achieving full comparability of finished goods, improvements in their durability and reliability in operation and meeting delivery dates. Perfection of the mechanisms for managing the national economy in the People's Republic of Bulgaria and the USSR creates the necessary organizational and economic conditions that stimulate the development of close ties.

[Question] What new Soviet goods can we expect to see on the Bulgarian market?

[Answer] During the latest five-year plan, there will be increased supplies from the USSR of machines, materials and spare-parts for industrial and other projects which will be built and reconstructed here with Soviet technological aid. Among the more important are: blocks 5 and 6 of the Kozloduy atomic power plant, general reconstruction of the Dimitrovgrad chemical plant, the 750 kilovolt power line linking the USSR, the Romanian Socialist Republic and the People's Republic of Bulgaria, modernization of the Ikhtiman cast-iron foundry and the Septemvri industrial pipe factory.

Further improvements in technological standards of mechanical engineering products supplied by the USSR will be assured by increasing imports of computerized metal-cutting machines, which can be incorporated into smooth running automated production, modules and finished goods for the production of robots, articles for toolmaking and progressive new communications equipment.



Conditions are good for further development, reconstruction, extension and modernization of production capacity, construction of power plants, the chemical industry, cellulose and paper industry, transport, etc.

Imports of consumer goods from the Soviet Union will continue to grow. The basic imports will continue to be durable goods, such as new car models, new models and types of color televisions, automatic washing machines, new types of watches, various musical instruments, goods from the pharmaceutical and cosmetics industries, gourmet products from the food and tobacco industry, etc. These are new high-quality indices, world-level goods.

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CSO: 2200/134

CZECHOSLOVAKIA

## ASPECTS OF CHINESE ECONOMICS VIEWED

### CSSR Trade Exchange

Prague SVET HOSPODARSTVI in Czech 14 Feb 85 p 3

[Interview with Eng A. Kondrk, director of the Commercial-Political Division of the Federal Ministry of Foreign Trade, by Lubomira Cizova: "Bilateral Interest in Developing Relations"]

[Text] In recent years the economic development of the People's Republic of China has seen a revival of rapid production increases. Over the past 2 years industrial production has achieved average increases of 8 to 9 percent, and all planned indicators have been exceeded. In industry the PRC has adopted the program of the so-called four modernizations (agriculture, industry, defense, science and technology), and by the year 2000 intends to have reached state-of-the-art sophistication in all these areas. These and other issues in the economic development of the PRC have for some time now been at the center of worldwide public attention. Accordingly, we requested some background information from the director of the Commercial-Political Division of the Federal Ministry of Foreign Trade [FMZO], Eng Antonin Kondrk.

[Question] Until 1959-1960 the foreign trade turnover of the PRC almost constantly increased. At the beginning of the 1960's, however, the exchange of goods between almost all CEMA countries and the PRC declined. Only after 1980, when the PRC made some overtures, was there a gradual revival of economic and commercial cooperation. Socialist countries have recently been attempting to exploit the opportunities that have been offered. What has Czechoslovakia been doing in this regard?

[Answer] Resolutions adopted by specific agencies of the PRC in 1978 served as an important milestone in the evaluation of the role to be played by foreign relations in implementing the development objectives of the PRC national economy by the year 2000. In these resolutions the PRC set for itself an ambitious program for the modernization of industry which, among other things, includes the extensive participation of other countries in the reconstruction and modernization of plants. This is primarily a matter of joint ventures, joint geological research, joint crude oil and mineral extraction, production cooperation and independent undertakings.

In recent years the Chinese side has expressed an interest in developing economic cooperation with the CEMA countries. Even though the discussions are for practical purposes in their infancy, it may be assumed that the Chinese side will be concentrating on obtaining technical and technological information and learning progressive technologies. Given the technical advancement of the socialist countries, their participation in the economic development of China has been relatively small. The preconditions have, however, been put in place for this gradually to increase.

Regarding the specific activities of Czechoslovakia, I want to note that the first contract for an exchange of goods between the CSSR and the PRC was signed in 1950. In the 1950's we delivered to the Chinese numerous turnkey investment projects. As our Chinese customers have commented to us since then, these facilities continue to serve the purpose for which they were built.

Between this time and the 1960-1962 period trade increased almost continuously. In the second half of the 1970's goods exchanges again increased, but this trend was disrupted by the extraordinary events after 1980. To some extent this shortfall was compensated later on by a previously signed contract for deliveries of Czechoslovak power generation equipment to China and counterdeliveries of Chinese goods in the years 1980-1983.

[Question] What has been the structure of goods exchange during this time?

[Answer] From the very beginning of our mutual relations machinery and equipment have made up a major portion of Czechoslovak exports to China. At the beginning these were turnkey projects, and later machine tools and trucks. The above-mentioned contract for deliveries of Czechoslovak power generation equipment--turbines with a capacity of 4 x 200 megawatts--contributed to an increase in Czechoslovak machinery exports. In recent years exports of traditional machine tools have declined, with the majority of machinery deliveries under existing trade agreements now consisting of power plant equipment and Tatra trucks. Raw materials and materials represent another group of products in the Czechoslovak export mix (including rolled materials, steel pipe, polyethylene, polypropylene, etc.).

Agricultural products and foods have been the main items in our imports from the PRC. We traditionally import from the PRC a substantial volume of rice, cocoa and soy beans, peanut oil, fruit, vegetable and meat preserves, tobacco and herbs. We also import a lot of raw materials, previously almost one-third of our imports, but more than this in 1985. These imports include tungsten concentrate, rosin, talc, cadmium, wax, pigskins, horse hair, and the like. The importance of Chinese consumer goods is also increasing on our domestic market. We have been purchasing primarily textiles, porcelain, office and school supplies, sporting goods, footwear and toys.

[Question] Last year commercial contacts revived between the PRC and the CSSR. A delegation from the PRC visited our country in April, led by the deputy chairman of the State Economic Commission, Zhu Rongji. In May we sent a delegation to the PRC headed by the minister of foreign trade of the CSSR, Bohumil Urban.

In July the minister of foreign economic relations and trade for the PRC, Chen Muhua, visited the CSSR, and in November the federal minister of general engineering, Pavol Bahyl, visited Beijing on the occasion of the opening of an exhibition of Czechoslovak machinery. How was this activity reflected in trade results last year and what are its implications for the future development of bilateral economic and commercial relations?

[Answer] You are correct in stating that recently Czechoslovak-Chinese economic relations have begun to develop in promising directions. Negotiations at the ministerial level have formed not only a basis for a substantial expansion of mutual goods exchanges in 1984, but also established the objectives for future economic ties. I want to emphasize that these discussions have resulted in agreement on the fundamental premise that the development of bilateral ties will continue to be pursued on a long-term basis.

Regarding the results of trade in 1984, we would evaluate the results as very good in the sense that trade volume more than doubled from the previous year. The structure of exchanged goods is corresponding more and more to the structures of our respective economies and the economic interests of both countries. Moreover, during the year a further expansion of original agreements concerning certain attractive imports items for our consumer goods inventories was negotiated.

[Question] What currency is used in our dealings with the PRC?

[Answer] At the beginning of our trading relationship all payments were made in accounting rubles. At the suggestion of the Chinese side the currency was changed to clearing Swiss francs as of August 1970. This technique of accounting is consistent with appropriate intergovernmental agreements. Noncommercial payments have been made since January 1979 in a freely exchangeable currency. The other CEMA countries have a similar way of accounting for their trade with the PRC.

[Question] At the end of last year the chairmen of the state planning commissions of both countries had a meeting. What were the results of their discussions?

[Answer] The discussions confirmed the interest of both countries in longer-range and more planned cooperation in certain predetermined basic areas. The delegations informed each other of the areas of interest to them and of preliminary possibilities for trade.

[Question] What sorts of discussions, and at what level, will take place this year?

[Answer] Within the context of increased activity and attempts to expand commercial and economic cooperation discussions will be initiated this year regarding a long-term agreement on the exchange of goods and payments. In Czechoslovak exports we are anticipating, among other things, increased deliveries of machinery and equipment, including turnkey projects. Examples include the delivery of two steam-powered generating units of 500 megawatt capacity each,

a brewery, a cement works, equipment for coal gasification, trucks, tractors and agricultural equipment, textile and machine tools, with the potential for other deliveries of advanced Czechoslovak equipment.

In imports we will attempt to increase the volume of trade in the traditional items, and to maintain the existing imports structure. The mix of quality consumer goods will be expanded in order to expand the supplies of goods available domestically. This will be especially true of textiles and textile products, footwear, school and office supplies, consumer durable goods (tape recorders, cameras), as well as other potential items.

[Question] Is consideration being given to other forms of cooperation with the PRC?

[Answer] Next year we will be actively trying to get involved in the rebuilding and modernization of Chinese industrial facilities, to better supply our partner with exports of modern Czechoslovak equipment incorporating progressive technologies, as well as to exploit possibilities for broader economic cooperation based on mutual advantage. The establishment of the Intergovernmental Joint Commission for Commercial, Economic, and R&D Cooperation will assist in speeding up the talks concerning the improvement and expansion of mutually beneficial cooperation between our two socialist countries.

Negotiations with the Chinese are difficult because competition on the Chinese market is intensifying. In order, therefore, to make inroads into this market it is necessary to respond to the needs of the PRC. For us this means that the quality of products provided, delivery times, and service must all be the best possible.

#### Computer Technology Modernization Discussed

Prague SVET HOSPODARSTVI in Czech 20 Feb 85 p 4

[Article: "China: Modernization Plans in Computer Technology Sector"]

[Text] At the end of 1982 more than 3,800 mainframe and minicomputers had been installed in some 30 sectors of the Chinese national economy. Of these 3,800 computers, 674 were imported. The sectors where they had been installed included the oil industry, the chemical industry, metallurgy, coal mining, light industry, the textile industry, the general engineering sector, electronics, the railways, in transportation, in agriculture and forest management, as well as in meteorology, health care, planning and statistics and culture. This information was provided at a recent regional conference on computer technology in Southeast Asia in Hong Kong by a Chinese professor, Chen Li-bei.

In terms of users, 62.2 percent of all computers were installed in industry and transportation, 17.9 percent in science and the educational system, 3.4 percent in cultural and health care facilities, 3.2 percent in commerce and banking, 1 percent in meteorology, agriculture and forestry, and 12.3 percent in other sectors. Many sectors use their computers primarily for scientific calculations (27.7 percent), with data processing accounting for 20.6 percent of their use, production process management 18.5 percent of use, and other applications 33.2 percent of use.

At the end of 1983 the Chinese computer industry, according to Prof Chen Li-bei, had in addition to 111 production plants 8 institutes and 13 organizations for applied technology. These facilities employed 90,000 people, 16,300 of whom were engineers and technicians.

The production of this industrial sector increased sharply in 1983 in comparison with 1982 (by 70.5 percent, to 829,640,000 yuan). Production included, among other things, 360 mainframe and minicomputers (up 62.9 percent), 5,436 microcomputers (up 265.8 percent), 3,310,000 portable calculators (up 88.1 percent) and 14,204 units of peripheral equipment (up 300.1 percent).

The number of microcomputers installed as of the end of 1983 was estimated at 30,000 units. Based on a survey taken of 1,152 microcomputer users, 29.9 percent of those in the field are used for scientific calculations, 17 percent for the management of production processes, 31.3 percent for data processing, and 21.8 percent for other purposes.

Overall sales of the Chinese computer industry are slated to increase, within the context of the modernization of the entire country and the planned four-fold increase in economic efficiency, by a factor of 20 to 30. While doing so, this sector is to remain focused on the following objectives:

--The application of computers, with an emphasis on microcomputers, for the modernization of traditional industrial sectors is slated to increase rapidly. Some 400,000 industrial enterprises represent a huge market for the multipurpose use of computers. Computer utilization, however, will be focused first on improving economic efficiency and quality, then on management and cost reductions, but not at all on work force reductions.

--Considerable attention is to be devoted to the development of a software industry. The number of organizations involved in software development should increase over the next decade from the current 30 to several hundred similar organizations. Concurrently, support is to be given to cooperation with other countries, as well as to the development of export opportunities.

--An organization is to be created for computer servicing and for intensifying research and development on computers capable of operating in Chinese and with Chinese characters. The training of technical personnel is to improve, especially of experts in systems analysis and software. This objective is considered to be of the very highest priority for the production and installation of computers. For this reason also the number of software experts is planned to increase in the next decade from the current somewhat less than 10,000 to more than 100,000 individuals.

--Plans also call for a continuation of the importing, either directly, within the context of joint ventures, or through license purchases of appropriate state-of-the-art technologies related to production techniques, key equipment, final products, assembly groups and selected components, for an intensification of technical exchanges, the modernization of existing research institutes and plants in a planned fashion, and the construction of a certain number of key enterprises.

According to official data, the Chinese computer industry achieved second generation sophistication in 1965, third generation in 1971 and fourth generation in 1983. In December 1983 Chinese scientists completed the Galaxy computer system with a capacity of 100 million operations per second, making China one of the very few countries in the world capable of building such a computer.

A large portion of overall Chinese capacity, however, is, in the opinion of experts, poorly utilized because of inappropriate programming. Therefore, in the future Chinese computers are to be built to be compatible with foreign products, thus marking a departure from the earlier generations of machines. The programming languages most in use in China include FORTRAN, BASIC, COBOL, and PASCAL.

#### Production Management Reform Discussed

Prague HOSPODARSKE NOVINY in Czech No 8, 1985 p 11

[Article by Eng Eva Durlova, CSc: "Reforming Industrial Production Management"]

[Text] The march of the PRC into the 1980's has been marked by increasing activity in the area of national economic management. Concrete manifestations of this have included the formulating of economic reforms which are intended to guarantee the fulfillment of the objectives of the four modernizations (the development of agriculture, industry, defense, science and technology). This has involved, however, more than the mere designation of a general objective, but also specific interventions into the management of production enterprises.

According to documents for the reform of the economic system which were adopted last year by the Third Plenary Session of the CCP Central Committee, the reform affects all urban production enterprises. This session thus culminated a long-term process of developing fundamental measures for that part of the national economic complex not already included in the agricultural reform of 1978. In contrast to initial attempts, which were undertaken exclusively in state production enterprises, the 1984 reform affects all sectors of the urban economy.

The reform does not depart from the normal operating framework of the national economy and the utilization of economic mechanisms. In addition to several specifically Chinese matters, such as the adjustment of the relationships between the economic and political leadership within the enterprise (in the past the economic leadership was forced into the background and all authority was exercised by the party organization), the reform modifies the basic relationships between the center and enterprises. A gradual decentralization is taking place, which is evident at the enterprise level in some independence of decision-making and management. One fundamental change is that strictly administrative management has been done away with. The state plan provides only orientational guidelines, with most of the emphasis being placed on taking initiative to fulfill and overfulfill established targets. After fulfilling the plan, enterprises can react to market demand and make their own decisions as to whether to expand existing production or begin to produce goods that are in demand. Enterprises have also obtained some decisionmaking authority for the selection, assignment and even discharging of blue-collar workers and employees. Principles of



economic incentives are gradually being introduced. Enterprises are managed by the plan and the financial aspects of their economic performance are evaluated. Transfer payments from profits are predetermined, as well as the magnitude of the allocations to basic enterprise funds, with the remainder allocated to increasing the enterprise bonus fund.

One of the important elements of reform is a resolution of the issue of capital investment. The uncontrolled investment activity of specific enterprises has, in fact, had a long-term negative impact on nationwide economic performance. At the beginning of the 1980's, to be sure, some fundamental measures were taken to restrict investment, but concrete results have continued to be unsatisfactory. Enterprises have drawn on state as well as local funds and their own resources, but since there have been no penalties for unjustified investment projects or noncompleted projects the situation has remained largely unchanged. Only the involvement of the bank in the capital investment process has brought a qualitative change on this issue.

Basic capital investment will in the future be strictly controlled by bank loans. In addition to these resources, enterprises are supposed to utilize primarily their own resources. Only large projects with nationwide significance will continue to be subsidized from the state budget.

In connection with a strengthening of the planning sphere, in 1978 there has been a renewal of the activities of the State Economic Committee, which had been abolished in 1966 after 10 years of operation. The State Economic Committee had originally been spun off from the State Planning Committee. This committee develops short-term plans and, primarily, controls the fulfillment of state plan targets. Issues of methodology and long-range planning are under the authority of the planning committee.

An increase in the sophistication of management, which will be connected with the implementation of reform measures, also makes it necessary to be concerned with the qualification levels of management personnel. In October 1983 the State Commission approved the establishment of the Committee for the Management of State Examinations for Senior Managerial Personnel. This committee conducts comprehensive examinations for enterprise managers, plant directors, and their assistants every 6 months. The successful fulfillment of the examination requirements is one of the fundamental preconditions for holding such positions.

All of these measures, however, are still in their early stages. Their experimental testing in state production enterprises, however, uncovered several shortcomings. In terms of the actual scope of the reform, however, these were considered to be unimportant. It is assumed that more than 1 million enterprises will be involved in this process. These enterprises employ more than 80 million people. On a national level the taxes and transfers from these enterprises represent nearly 80 percent of all state revenues.

As stated in the adopted reform documents, the shortcomings of the urban economic structure that are retarding the development of the forces of production have not been eliminated in any real sense. It is admitted that the efficiency of urban enterprises is very low and that the immense potential of the urban economy has not been well utilized, as evidenced by ongoing serious losses and inefficiency.



The need to increase the technical sophistication of production has also become an inseparable part of this development. In previous economic policy objectives extremes have predominated--from the full reliance on resources to a major orientation abroad. Current practice is pursuing a moderate course based on the utilization of resources of the Chinese economy along with the advantages of international economic cooperation.

The overall technological and physical obsolescence of the basic capital stock of Chinese industry is seriously threatening future developments and is retarding the growth of production effectiveness. Official Chinese sources state that production consumption in 1982 and waste during production caused the average profit per 100 units of overall production to be 33 percent lower than 1957, which translates into lost profits on the magnitude of 30 billion yuan. This has also been evident in the fact that of the 55 main industrial products 22 types have not achieved even mediocre quality levels. This reality has been further complicated by the fact that industrial enterprises have not implemented a smooth circulation of funds, there has been excessive stockpiling of materials and large amounts of financial funds have not been utilized.

One of the most serious problems influencing the growth of industrial production has been a shortage of power generation resources.

The economic reform has also offered incentives to develop individual enterprise and collective production enterprises. In the 1978-1983 period 863,000 individual enterprises were set up, employing 7.5 million people. As indicated by more detailed statistical data, this number includes more than 2.6 million retail merchants. Since 1978 alone there has been a 150 percent increase in this type of enterprise. Developments to date indicate that at this rate we will rapidly reach a situation such as existed in the individual sector in China in 1953, when this sphere employed 8.4 million people, or 10 percent of the total urban population.

In 1983 the total production of urban collective enterprises reached 2.44 billion yuan, which represents a 19.7 percent increase since 1982. These enterprises realized a net profit of 430 million yuan. Overall industrial production reached the 1980 growth rate only in 1983; that year, however, saw a modest increase in this rate.

This evolution has been influenced mainly by stagnation in the production of coal and crude oil in 1980 and 1981; in subsequent years production of chemical fibers declined substantially; and the development of metallurgy and machine building stagnated.

This was the result in part of an ongoing negative policy of giving priority to the development of light industry over heavy industry. This in turn followed from an orientation emphasizing the need for a broader satisfaction of requirements related to an increased standard of living for the population.

The fate of the reform will be decided during the upcoming 5-year period, which will indicate the level of preparedness of the managerial apparatus for the implementation of this demanding program.

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## STRUCTURAL CHANGES REQUIRED BY INTENSIFICATION PROCESS

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[Article by Docent Eng Valtr Komarek, DrSc: "Structural Changes--Yes, But What Kind?--The Only Way Ahead: Intensification"]

[Text] Contemplations of the optimal structure of the Czechoslovak economy are still oriented primarily toward the structure of industrial production and in a rather technical or narrow technoeconomic conception. However, there is a need to weigh and deal with wider national economic relationships. Which direction should we embark on? After all, the objective is improved effectiveness of the process of economic renewal and its intensification.

Let us pose the question of whether transition from extensive to intensive development calls for and is dependent on certain structural changes. Various analyses and working hypotheses indicate that the answer will be positive but, at the same time, not simple. The complexity of the matter is constituted by the very essence and contents of the category of the structure of the national economy and the problems attendant to its optimization in general.

Routine planning and statistical practice which expresses and assesses structure on the basis of shares of gross production of individual branches in the national product or in overall industrial production, etc., are struggling here with considerable risk of errors, starting with international comparisons, while advanced capitalist countries monitor structure in terms not of gross, but of net production (value added). That yields values quite different from those which we usually compare. For example, we say that our share of general engineering in total industrial production, as in most of the advanced capitalist countries, represents approximately one-third, in the case of the food industry one-seventh, etc., while in terms of net production the share of general engineering in the CSSR would probably reach 40 percent, while in the case of the food industry it would decrease to the order of 7 percent. This is compounded by serious distortions connected with prices--particularly by various relations between domestic and world prices, the acquisition value of assets, extent of amortization norms.

The more complicated aspects of the problem come to the fore when we realize that the structure of production and of the national economy is not only connected with the technical composition of production forces and specific labor,

but that it represents a socioeconomic category tied to the process of division and productivity of social labor, ergo with the effectiveness and costs of social labor, with economic interests, objectives, etc. Thus, that its optimum development does not depend merely on innovative processes. It is also based on the cost situations in the domestic economy and their relations to the world economy, on the status of fixed assets, qualifications of manpower and internal resources in general, on the overall economic maturity of the country, the priorities and objectives of socioeconomic development, the state of economic equilibrium, participation in international division of labor, etc.

In the specified relationships we can deal with:

--some overall features of the structure of the national economy that are related to the types of extensive and intensive development in general;

--structural changes which within the contemporary economic reality specifically determine the transition of the Czechoslovak national economy to a path of intensive development.

#### A Contradictory, Differentiated and Conflicting Process

The stage of extensive development is characterized by such structural features and relations as a considerable lead in time in the growth of national product ahead of national income, of consumption for production operations ahead of non-productive consumption, of production investments ahead of non-productive investments, of industry and construction ahead of other branches, of national production group A ahead of group B, etc. The transition to intensive development should then be characterized by a reversal of or far-reaching changes in these relations. This calls particularly for introducing a process of cutbacks in consumption for production operations and production accumulation in the growth of national income ahead of national product, giving preference to restoration and modernization investments on the basis of sinking funds ahead of development funds from gross investment and, consequently, also certain reductions in the extent of production accumulation. This should inevitably lead to a basic reduction in the lead in time which group A has over group B, up to a potential reverse development in the course of a certain limited time period. With a view to the growth of economic advance in the former progress of industrialization there should obviously occur an acceleration in non-productive services and/or in the tertiary sphere.

Available analyses show that under the current specific conditions of the Czechoslovak economy, a necessary prerequisite for successful intensification are macrostructural changes, first of all with regard to the relation of group A and group B (and/or complexes of selected branches and sectors of both groups) and, second of all, with regard to relations of the primary, secondary and tertiary spheres.

What this involves specifically is that the largest amount of latent unused resources in the Czechoslovak economy--as they have been written and talked about for quite a few years--are represented by the production of group A. Thus, if we really want to improve the utilization of fixed assets as well as

the utilization of the energy and material substance of the resources of our economy, then we are faced with the possibility of improving the dynamism of final consumption by the populace and by society without increasing (or more slowly increasing) production of most branches and sectors of heavy industry, e.g., production of plants and facilities for domestic consumption, production of steel and of rolled stock, production of gray cast iron and cast steel, production of cement, production of plastics, nitrogen fertilizers and the consumption of primary energy sources for production operations.

To preclude any misunderstandings, I hasten to add that I am fully aware of the general possibility of transformation through foreign trade; it is possible to continue accelerating increases in production by group A, export it and import for it the production of group B. However, I use as my basis the specific situation in our external economic relations and the realistic commodity structure of foreign trade. This structure is such that today we import more of group A production than we export, so that in the position of utilization of the national income the share of group A is even higher than in the generation of national income. Second of all, due to this great importation of the production of group A we are gradually and to a greater degree increasing the exportation of consumer goods at the expense of efficiency (sectors of this production were not ready technically or investment-wise to play so significant an export role as they do today) as well as partially at the expense of supplying the domestic market. CEMA countries at the present also show greater interest in exporting machinery rather than food and consumer goods. Any assumption that in the coming years we shall export to them increasingly more products of group A for importation of products of group B is unrealistic.

The thesis regarding a necessary change in the mutual relation of the dynamism of group A and B in the Czechoslovak economy of the 1980's and, possibly, in part of the 1990's means specifically that in general it would be possible to increase the final non-productive consumption (personal consumption by the populace and available social consumption goods) by e.g., 2-3 percent annually with the proviso that this dynamism would be borne by services, consumer durables and electronics, the agroindustrial complex, the food industry and selected sectors of the consumer goods industry, and also a selected area of the general engineering and the consumer goods industry sectors which make exports more dynamic and effective. At the same time, production of group A could keep increasing by, e.g., 1 percent annually.

Production of steel and rolled stock could not only stagnate, but even show a significant absolute decrease, as could production of plastics, nitrogen fertilizers, cement, gray cast iron, etc. Increases would occur at a more significant rate only in the production of electric energy and some materials in short supply and, further, selected heavy industry products.

All this is understandably a hypothesis and an example. It calls for specific and variable elaboration. However, what should be considered to be beyond dispute is the fact that structural changes in the Czechoslovak economy of the 1980's and 1990's will represent a contradictory, sharply differentiated and conflicting process where a prerequisite for the development of some sectors will be the strong retardation of others. The time when we could develop everything, with differences only in the rate of progress, is irretrievably gone.

The prerequisite for successful structural adaptation of the Czechoslovak economy is the application of a systematically selective policy from the viewpoint of effectiveness.

#### Inevitable Trends of Continued Development

It can be stated very briefly that the CSSR finds itself currently at an economic level that can be approximately expressed as being on the order of \$5,000 of per capita domestic product (in 1975 prices) which is, more or less, close to the level of, e.g., Great Britain, Italy, Austria, Japan, but less than Belgium, the Netherlands, Norway, Denmark, the FRG.

In all of these advanced capitalist countries there has appeared an absolutely coincident and unequivocal trend showing that after a certain amount of increases in their economic level they inclined toward an increased share--up to a gradually dominant position--of the tertiary sector. This process progressed with almost remarkable mathematical precision--as individual countries entered the zone of economic maturity expressed on the order of \$3,000-4,000 per capita, the share of the tertiary sector in employment rapidly exceeded the order of 40 percent and sharply increased to 50 percent. With transition into the zone of \$4,000-5,000 per capita this sharp increase continued up to approximately 55-60 percent, at which level in the zone of \$5,000-6,000 per capita it becomes more or less stabilized with only commensurate continued increases; in countries found in the zone of \$6,000-8,000 per capita it ranges around 60 to 65 percent. Shares of the tertiary sector in investments showed a similar trend.

This involves a tremendous reallocation of resources (both manpower and investments and, proportionately, of others), the most extensive phase of which progressed in most advanced capitalist countries within approximately 10 years, mostly in the 1965-1975 period.

This far-reaching rift affected the entire network of national economic and social relations of the given economies and societies. It was connected with basic changes in the structure of supply and demand, the structure of incomes and expenditures, in the dimension and utilization of free time, etc.

Understandably, such a development could not do away with the basic socioeconomic contradictions of capitalist society, but that is another aspect of the matter.

It appears that this entire process can be interpreted in its essence as an economic necessity, an indispensable condition for the normalized functioning of the economy at a certain stage of its maturity. It involves the simultaneous attainment of a high productive force of labor and a high degree of satisfaction of basic needs which strongly brings forth a demand for leisure time and the so-called secondary needs, and in this sense also modifies people's motivation, stimuli and goals of economic growth. Among other things, it translates into stabilization of food consumption with simultaneous explosive growth of demand for and supply of consumer durables (first headed by motor vehicles, later by videotechnology) and an avalanche of the expanding assortment of industrial consumer goods in general. It also means an explosive growth of services of

all kinds, particularly in connection with the enjoyment of leisure time, reinforced elements of differentiation up to the individualization of demand, great proliferation of needs and development of the entire infrastructure, greater attention to the environment, etc.

These changes have received little study and economic comparisons are here often superficial. This understandably cannot involve even the smallest ideological concessions and promotion of the Western life style. It involves dry economic analysis. Here it appears that the inevitable progression of the gradual satisfaction of basic needs and dynamic proliferation of secondary needs is of general validity and a shift to public services from the private domain, "self-sufficiency," etc., should apply even more to socialism. If in practice there is proliferating the notion that each family should have its own recreational dwelling, often in the form of a weekend retreat as ostentatious as possible, then this is rather a reflection of certain deformations, e.g., the unfortunate concept of the quite uniform paneled settlements with standard small apartments which compels the escapist cult of "quiet cottages." Here the seemingly inexpensive resolution of the housing problem--if we include the long kilometers of engineering networks to retreats and the expenses for a second apartment or weekend retreat--is in actuality quite expensive.

#### Room for Effective Dynamization of the Economy

Now we are not concerned with partial problems of one kind or another, but with conceptual postulation of the entire problem. In this sense the entire problem must be first studied in greater depth to outline the relevant variable prognostic models without the specific deformations of capitalist society and meeting the objective trends in the needs of our populace.

Such a gradual reallocative operation would at the same time create room for effective dynamization of the national economy, since the transfer of employment from the production sphere would enable it to increase productivity rapidly without posing the problem of what to do with people.

In other words, if we will be developing the economy in the next 5-10 years, e.g., at a 3-percent rate of generated national income annually, then with the expected increments in employment resources and their allocation as up to now, employment in the production sphere will keep increasing by roughly 0.6-0.8 percent, and the actual room for growth of labor productivity for this entire period will amount to a mere 2-2.5 percent annually. That represents one-half and even less than in times of extensive development. Thus there is a need for long-term creation of sufficient room, either by cutting down on working time or by transferring manpower into the service sector, whereby--in view of the current relations between the resources and needs of the economy--the latter alternative should be given preference. And there is probably even no need for rendering detailed evidence proving that today there is a considerable shortage of manpower in many very important service sectors.

The macrostructural changes outlined above also serve to indicate certain trends in mezzosstructural changes--at the level of branches and sectors in material production, particularly in industry. Here too should dominate the trend toward



providing a certain "relief" for the structure of production in the sense of reducing the existing high demands of our economic development on materials, energy and wages, and thus also rapid increases in improving the level of valorization processes.

It is possible to devise realistic programs for improved utilization of key materials. General engineering and, within it, electronics are here of key importance. While a substantial increase in the share of electronics is everywhere written about and planned to cover 20-25 percent of all general engineering production, we still lack any realistic concept. Expectations of great investments in this field are once again being revived today with the belief that tempestuous development of electronization on their basis will not occur until the 1990's. However, it can be asked whether Czechoslovak electronics, with the number of employees and basic floor-space already at its disposal, could not and should not produce results of a higher order from this already established base and, consequently, in the years immediately ahead. At the same time, why keep avoiding the problem, commonplace the world over by now, of electronic production potentially attenuating some sectors and productions of the existing conventional general engineering and, in so doing, taking over their floor space and employee.

In my opinion, our electronics urgently needs pointing out and implementation of several carrier programs instead of the current scattered production, which brings about truly significant results in only a few sectors of the economy.

Of course, such carrier programs would "nail" manufacturers to entirely specific deliveries for the domestic and foreign market with strict quality and price controls, preventing manipulation with an ever "new" and baffling assortment accompanied by practically individually calculated prices with high profitability. This involves conceptual problems for general engineering as a whole as well as many complicated vertical and horizontal linkages. This is obviously one of the key program questions.

It would be, of course, desirable to analyze additional problems of structural development concerning, e.g., the consumer and food industry, or the entire agrocomplex, but within the space limitations of this study I confine myself to those listed above.

#### Strategic Doctrine of Research and Development

The transition to intensive development inevitably calls for more massive and more dynamic innovations throughout the national economy. However, there is a need for avoiding simplification. First of all, R&D cannot be viewed as the only and all-redeeming means of intensification.

Acknowledgement of the existence of extensive internal untapped resources in the Czechoslovak economy leads us to conclude that the starting point toward economic dynamism is not only and exclusively R&D, but to a great extent also the attainment of conservation in the use of resources in all sectors of the economy. This represents, on the one hand, a great chance for dynamic development of the economy and, on the other hand, the great political urgency of turning basic attention toward the problem of improving socialist productive forces and relations, primarily the problem of economic cadres and economic management.

This statement understandably does not detract from the key importance of R&D, which together with the economic use of resources represents inseparable motive forces of intensification, whereby the accelerated dynamism of R&D is to a considerable extent the condition and prerequisite for mobilization of the economy's internal resources.

However, a fact meriting consideration is whether we have not often interpreted R&D in a more or less extensive concept, i.e., in the direction of large innovative investment projects and technological revolutions, while underestimating mass product and process innovations. This problem will not become simpler even over the next 20 years.

Thus, e.g., the heralded great revolution in power engineering is turning out to be a process more complicated than was the case in the concepts prevalent 10 or 20 years ago. The harnessing of thermonuclear reaction that was expected by the end of the current century is being postponed until well into the next century, and the construction and exploitation of nuclear reactors of the contemporary types appear to be considerably more expensive than was originally expected. The transition to reliable and effective (breeder) reactors, too, cannot be expected to occur sooner than 10 to 20 years from now.

In the same way, can there be any talk of a new revolution in regard to material. The former concepts of a synthetic material base, based on the development of chemization, turned out to be strongly exaggerated, and in the area of expanding prices of crude oil there crop up many formerly unforeseen economic problems. A technological revolution is easier to conceive of, but even here there is a need for avoiding overestimation which tends to be quite frequently based on technological fascination. On the one hand it appears that the ascendancy of biotechnologies is enormously accentuated, while it is rather true that applicable results in this area will affect overall production and effectiveness in the next decade to a limited degree, even though sober contemplation provides for some potentially interesting creative concepts. A more resolute turnover will obviously still have to be awaited, understandably not just passively.

Another "superdynamic" trend in contemporary R&D related to electronics, today mainly microelectronics, holds in combination with cybernetization and robotization the promise of considerable advances in automation, application of technological processes less demanding on materials and energy, but any substantial influencing of overall production and effectiveness in the next 10 years will be no simple matter and automatic development definitely cannot be relied on.

While warning against any illusions of great technological revolutions as early as the next decade, I do not want to detract from the overall contributions of R&D. Innovative dynamism is very tempestuous, generating product and process innovations in unprecedented numbers in relatively short periods of time and with relatively low demands on investment, making overall large contributions to effectiveness. At the same time, in addition to unleashing this contemporary avalanche of mass innovations of a lower order, it can be expected to encounter medium and large innovations of an intersectoral nature based on contemporary projects and in combination with the use of latent hidden resources of the economy. Through the promotion



of efficiency, improved organization and more effective motivation of enterprises and individuals it is possible to generate adequate resources for the next decade. For example, by comprehensive application of contemporary R&D findings already made worldwide, by improved organization and more rational behavior of people, it is possible to increase in the course of the next 10 years the final useful production of our agriculture by at least one-third (improved yield per hectare and utility of animals, elimination of great losses in cultivation, harvesting, storage, etc.), which would be adequate for meeting the needs for nutrients (moreover, at lower costs).

Similarly, it is possible to reduce in general engineering, construction and transportation the relative consumption of metals and energy by one-third or more. By available possibilities for automation and more effective mechanization it is possible to increase in most industrial sectors, but also within agriculture and construction, the productivity of labor roughly twofold, or at least by one-half. Application of the worldwide known available top technology can also basically innovate the overall supply of consumer goods on our domestic market, etc. Of course, this calls for adopting an adequate strategy for R&D with the generation of an entire complex of interlinked prerequisites leading to the substantial acceleration of practical implementation of R&D advances in our production (transition from routine production to turning out innovated products).

#### New Views of Social Development

Socialism in its existing development brought to the entire populace an unprecedented amount of social securities combined with general full employment, generally available free education and medical care, generally available retirement income, extensive care for mothers and children.

There arises the question of how to proceed farther in this field under conditions of transition to intensive development. On the one hand it is clear that no retreat can be made from basic social achievements. At the same time, however, their deformations should not be allowed to be carried out in the name of egalitarianism in remuneration and the erection of social barriers to the flexible implementation of structural changes, including the discontinuation of ineffective productions and the desired professional adaptability as well as territorial mobility of manpower. The principled theoretical standpoint backing up the current level of development of our economy and society and the problems of social justice and just remuneration under conditions of real socialism developing on that basis was promulgated by the 15th Plenum of the CPCZ Central Committee in April of 1982.

In this context, the problems of transition to intensive development must be seen and dealt with in a unity of economy, politics and ideology--specifically in perceiving that social development is not just the result, but also a significant source of economic development. I have already pointed out that from these resources of the national economy it is possible to attain qualitatively different syntheses in the sphere of consumption. It also applies that the development of needs progresses in certain inevitable trends of internal structural changes (foodstuffs, consumer durables, services, etc.), which must be

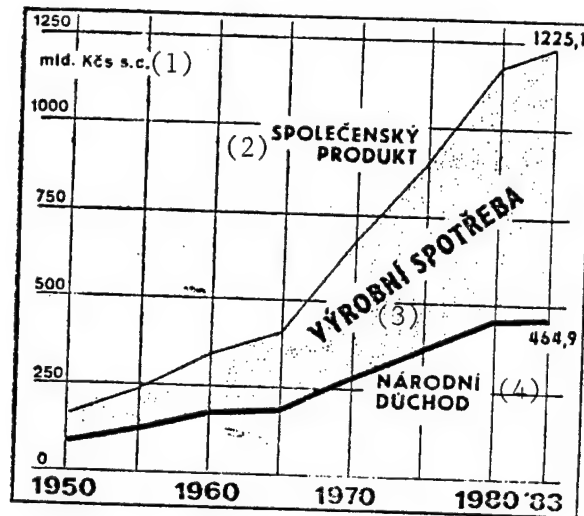
respected in the development of production and, consequently, in the specific utilization of resources. The development of consumption ultimately provides very active feedback on the development of the utilization of resources. On this background there looms very clearly the significance of leisure time as the measure of the affluence of the future society (leisure time as wealth itself), the significance of life style, "direct" investments in people, their education, the cultivation of natural talents, etc.

All of this is of enormous and yet entirely practical importance to the examination and resolution of the problems attendant to structural changes. A problem is constituted by the fact that some of these questions are still relatively often treated outside of economic reality as purely philosophical, sociological, etc. Even though the significant role of philosophy in their clarification is indubitable, it involves, nevertheless, an organic linkage between life style and economic development. Herein life style cannot be interpreted as a certain state beyond the boundaries of the economy, made possible through the latter's ultimate results, but in a dialectical concept as both the result and, at the same time, an internal component and motive force of economic development.

This should serve all the more to make obvious the immediate and deep economic involvement of such significant problems which specifically shape the people's living conditions as the housing problem, including its implementational dimension connected with certain concepts of settlements and formation of an integral settlement network and amenities, or the problems of public transportation for the populace, the material base of health care, the distribution system, etc., all the way to the "joined vessels" of the productivity of labor and the measure of leisure time, development of the industry and devastation of the environment, etc. In summary, a specific intensification concept for the development of the national economy cannot be formulated without dealing with the problems of life style (including clarification of the possible variants in this direction). On the contrary, these problems are of substantial initial significance to long-term economic strategy, whereby it applies that the more advanced the economy, the more conspicuous their significance.

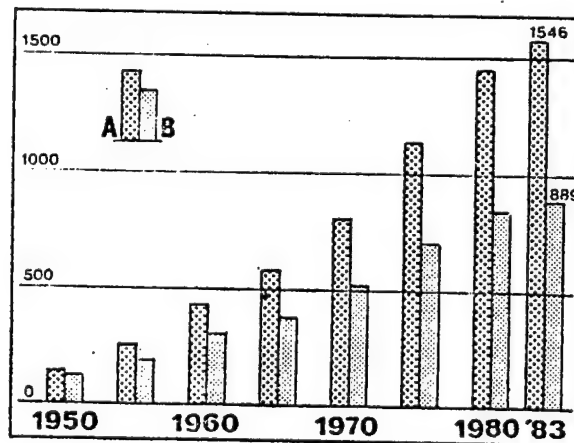
There is a need for perceiving the considerably detrimental effects of unilateral approaches to production resources and for examining seriously the potential leeways for mobility connected with changes in consumption and distribution, or in the utilization of the national product, i.e., with regard to the development of the sphere of services, the infrastructure and/or the tertiary sphere in general. Any strategy oriented merely toward resources would inevitably become devoid of reason in the national economy.

National Product and National Income Generated in 1950-1983  
(in billions of koruna in stable prices)

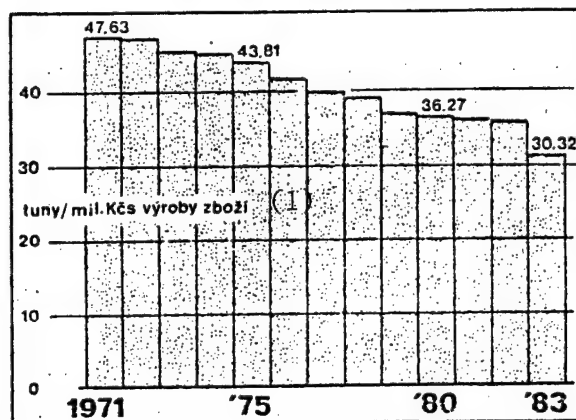


Key: (1) Billions of koruna in stable prices  
(2) National product  
(3) Consumption for production operations  
(4) National income

Industrial Production: Production of Means of Production (A) and of Consumer Goods (B) in 1950-1983 (1948 = 100)

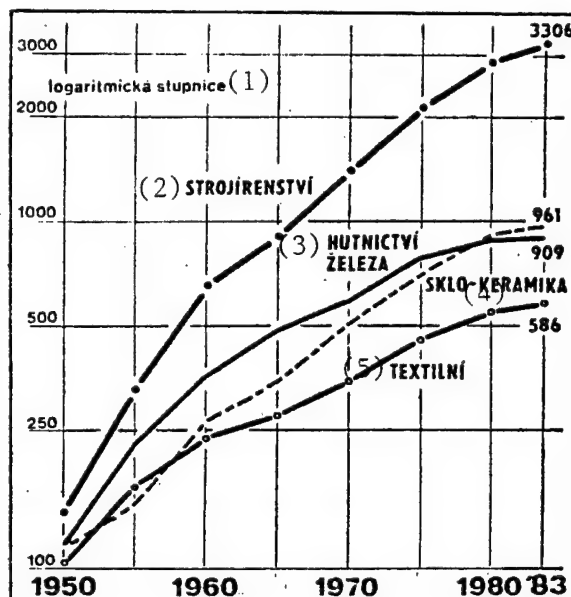


Specific Consumption of Ferrous Metals in Engineering Sectors in 1971-1983  
(in tons per Kcs 1 million of goods production)



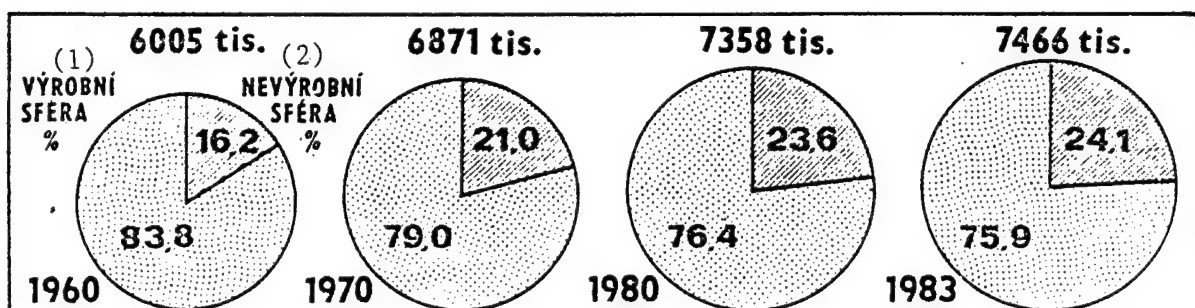
Key: (1) tons/Kcs 1 million of goods production

Growth of Industrial Production in Selected Sectors in 1950-1983 (1948 = 100)



Key: (1) Logarithmic scale  
(2) General Engineering  
(3) Ferrous metallurgy  
(4) Glass/Ceramics  
(5) Textile industry

Average Number of Employees in the National Economy  
 (Not Including Apprentices) in 1960-1983 in Thousands of Persons;  
 of Which in Percent: Production and Nonproductive Sphere



Key: (1) Production sphere  
 (2) Nonproductive sphere

tis. = thousand

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 CSO: 2400/318

CZECHOSLOVAKIA

# SALE OF LICENSES SEEN AS FOREIGN CURRENCY CONTRIBUTION

Prague SVET HOSPODARSTVI in Czech No 24, 1985 p 1

[Article by Eng Slavomir Sykora, Polytechna Foreign Trade Enterprise: "The Sale of Licenses--A Foreign Currency Contribution"]

[Text] The sale of licenses, that is, the assignment of rights to make use of patents, know-how (unpatented production knowledge and technology), industrial models and trademarks offered for payments, is the most important component part of the so-called international technology transfer, which involves all industrialized countries in the world. While purchasing licenses is essential and advantageous when one cannot meet the needs for scientific-technical development through one's own research, the sale of licenses brings important foreign currency contributions into the national economy. On a worldwide basis, the contribution from the sale of brainpower through active licensing is 5 to 10 times greater than profits from trading in goods. This is because the sale of brainpower is exceptionally profitable; the expenses connected with fulfilling the contract are low, since it is a matter of placing a value on past, already-performed work, and the export is carried out without any demands on material, labor force energies, or production or business expenses.

In the CSSR, the Polytechna PZO [foreign trade enterprise] has been developing the sale of licenses successfully for 25 years now. In the years 1981 to 1984 alone there were 193 contracts signed for the sale of licenses, of which 35.7 percent were with socialist countries, where the trade in licenses has shown a significant growth rate, especially since 1972, and 64.3 percent were with nonsocialist countries. While the number of contracts signed are in a 1:2 proportion, this says nothing of the trade volumes, where the contracts made with the socialist countries represent not quite 20 percent of the overall contracted volume of all licenses sold.

This is a result partly of the tradition of trading in licenses and partly of the long period when scientific and technical information was exchanged among the CEMA countries for free. Finally, one must take into consideration the fact that the greatest amounts of information are always exchanged between the CEMA countries through scientific and technical cooperation, the performance of joint programs, etc.

Despite its low volume, the growth rate of this trade with the socialist countries is noteworthy. While in the Fifth 5-Year Plan the number of active licenses sold by the CSSR to the CEMA countries was only 38, in the Sixth 5-Year Plan there were 98 contracts signed and there was an eight-fold increase in cash values. In the Seventh 5-Year Plan, we expect to close approximately the same number of contracts, but there will be a doubling of the growth in cash values in comparison with the previous 5-year plan, which shows the constantly higher values of the licenses offered by the CSSR. For years the most important partners for Czechoslovakia in the purchase of licenses have been the USSR and the GDR.

While in the past the public in the CSSR has often been informed of the most important license sales in the field of textile machinery (nozzle looms, spindleless spinning, and others) or in the field of the famous invention of contact lenses, in recent years a number of new inventions, innovations and technologies have entered our list of license offers, and there is interest in these things even though they cannot approach the foreign currency contributions which the discoveries mentioned above represented.

The most important license sales to the socialist countries in the last 4 years are, for example, the chemical technology for ammonia intensification (Chemo-project--Chemopetrol), the production of L-efedrin and contact lenses sold to the USSR (Spofa Prague), alcohol rectification in a vacuum (Liko Bratislava), and the production of ammonia from waste water (Prague-Bechovice Institute for Research and Utilization of Fuels).

A successful partner of the Polytechna PZO in the sale of active licenses is the Nove Mesto nad Vahom Research Institute of Mechanization and Automation, from whose new-product workshops have been sold the technology of the shaped wire, the synchronous assembly system, and the most important technology for electric spark roughening of cast piping developed jointly with the East Slovakia Iron Works in Kosice. Among the most successful licenses sold to the USSR are the production of petritol (East Bohemia Chemical Plants in Pardubice) and drawing pencils from Koh-i-noor Ceske Dubejovice. In the GDR, there was great success with the method of constructing chimneys using concrete flues sold by Teplo-techna Prague.

The volume of contracts signed with the nonsocialist countries is four times greater than that with the socialist countries, and the cash value in comparing the Sixth and Seventh 5-Year Plan is almost 2.5 times higher. The whole collection of contracts, especially contracts of the Cotton Research Institute in Usti nad Orlici, owes a debt to the previous successes of the textile engineering. Cooperation continues with the Savio Italie company in the field of spindleless spinning, innovations are being made in the field of spinning, and new technology is being used for frame production (Rieter Switzerland). By volume, the largest contract is the patent contract signed with the Japanese Nissan company for the so-called active laminar-flow confusor developed by the Brno General Engineering Plants which makes it possible to weave very wide fabrics by using air streams. This license, however, unfortunately remains unused by the transferee so far.

Another important group of licenses is in the field of chemistry, as provided by the East Bohemia Chemical Plants Syntehesia Semtin and the Lucebni Plants in Kolin. These concern technology for the production of mononitrocarbons, silicon products, and epichlorhydrine (Association for Chemical and Metallurgical Production, Usti nad Labem) sold to Sweden and Canada, and the production of timoframide developed in Slovchemie Bratislava. The license contracts of the High-Power Electrotechnical plants Prague for gravimetric lines for continual pouring off have exceptional volumes (even though in this case the foreign supplier caused great difficulties in getting the prototype operating).

The Czechoslovak Academy of Sciences is still one of the important suppliers of innovations for the field of licensing. These include both new developmental levels of contact lenses, whether it is a matter of their production (centrifugal pouring), new types (perforated lenses, lenses for astigmatism, or lenses inserted into the eye by operation), or new materials for their production, which make it possible not only to sign new contracts with traditional partners, but also to seek out new partners. Other important contributions of the academy include new technology in the field of laying down protective layers by use of plasma burners, as well as new pharmaceuticals (DDAVP, glapresin, carbo-vasopresin, and others) developed and commercialized under license in cooperation with Spofa, which is showing commercial successes with other products outside this field as well.

Of the important contracts signed with nonsocialist states in the past 4 years, one can also cite licenses from the field of mining, whether they involve an asphalt latex emulsion (the Kladno Anthracite Mines) or the anti-shock valve (Ostrava-Karvin Mines Ostrava) sold to the Netherlands and the German Federal Republic. The ministries of heavy and general engineering supply many important innovations and modern technology. These include the high-performance ventilators developed by the Kilevsko Plants for the Production of Air Handling Equipment, diesel ship engines on which joint development by CKD Prague and the Swedish firm Nordstjernan continues, filters and isolating settling tanks by Sigma Olomouc, the electroslag method of welding pipe from the Bratislava Welding Research Institute bought in the United States, and a number of licenses sold to developing countries and ensuring the long-term supply of Czechoslovak components. These include the SN 40, 50 and 555 lathes for Mexico (Engineering Equipment Factories Prague), printing equipment for India (General Engineering Plants--Adamov Machine Works in Adamov), Jawa motorcycles for Egypt, and a number of others. A successful licensing arrangement is the supplying of Czechoslovak technology for the construction of small cement plants in developing countries to the Swiss firm Maerz, connected with the delivery of equipment produced by the Prerov Machine Works.

It is obvious from this brief overview that, despite growing difficulties connected with the sale of licenses, Czechoslovak technology which cannot be utilized for the production of goods is successfully valued in international technology transfer. But it is without doubt only a small part of what has been developed by the Czechoslovak research and invention capabilities or what has been created in production over the years and what could, if it is offered for commercialization, bring a highly effective foreign currency contribution to our national economy.



CZECHOSLOVAKIA

## POSITIVE RESULTS OF FOREIGN TRADE VIEWED

Prague SVET HOSPODARSTVI in Czech No 24, 1985 p 2

[Text] The basic goals for Czechoslovak foreign trade for 1984 stemmed from the resolutions which the Message of the Presidium of the CPCZ Central Committee on the State Plan for Economic and Social Development for 1984 approved at the Ninth Plenum of the CPCZ Central Committee in November 1984. The specifications of those recommendations are expressed in CSSR Government Decree No 268 of November 1983 and Decree No 120 of May 1984, in which the goals for the individual branches of the national economy are established.

External relations in the area of the socialist countries were oriented toward a further intensification of economic and scientific-technical cooperation and mutual exchange of goods, especially with the member countries of the Council for Economic Mutual Assistance, with the Chinese People's Republic, and others. The approved plan ensured fulfillment of the intentions of the Seventh 5-Year Plan, obligations from long-term trade agreements, and other interstate and intergovernmental arrangements, including obligations taken on in the sector of socialist economic integration (the construction of factories and other facilities by the joint efforts of two or more countries, multilateral and bilateral specialization and cooperative production). The planned growth in trade with the socialist countries was expressed by an index of 108.4 points, of which exports made up 106.3 points and imports 110.3 points. The overall plan counted on a slightly higher figure for imports than for exports. In relation to the Soviet Union, the plan called for ensuring the further development of the mutual exchange of goods. In comparison with the actual figures for 1983, mutual trade was supposed to increase by 9.3 points (in current foreign prices).

The overall relations with nonsocialist countries planned on a growth of exports by 2 points over the actual figures achieved in 1983 and overall were based on the positive results of 1983, where one of the main goals was ensuring the further gradual restoration of balance in external economic relations.

The results of foreign trade achieved in 1984 are characterized by a further development in the mutual exchange of goods with the socialist countries and basically also by a balance in external economic relations and the achievement

of the planned goals in relations with the nonsocialist countries, including a certain level of activity in the trade balance as a means for reducing indebtedness.

In comparison with the actual figures for 1983, in 1984 the following resultant indicators were achieved:

--the overall turnover of foreign trade increased by 7.5 points and the plan was exceeded by 1 point, while in relation to the socialist countries the growth rate was 112.2 points and for the Soviet Union more than 113 points;

--overall exports increased by 8.5 points, of which exports to the socialist countries achieved a growth rate of 111.8 points and exports to the Soviet Union 114.9 points.

The overall exchange of goods with the socialist countries exceeded the goals of the state plan by 3.8 points.

In the field of exports to the socialist countries, the planned growth index was exceeded by 5.5 points. The achievement of these positive results was shared in by all the decisive supply agencies and branches with the exception of the Ministry of Construction of the SSR, whose fulfillment amounted to only 87 percent. In terms of volume, overfulfillment of the export goals was a result mainly of the efforts of the Federal Ministry of Metallurgy and Heavy Engineering, the Federal Ministry of General Engineering, the Federal Ministry of the Electrotechnical Industry, the Federal Ministry of Fuels and Energy, the CSR Ministry of Industry (mainly the heavy industry branches), the CSR Ministry of Construction, and others.

The increasing involvement of the CSSR in socialist economic integration also brought about a growth in the share of the socialist countries in the overall turnover of Czechoslovak foreign trade, which in 1984 amounted to more than 68 percent in current foreign prices.

In relation to the Soviet Union, the mutual exchange of goods also developed at a more rapid pace than was predicted, which is characterized by overfulfillment of the overall turnover by 3.8 points, exports by 5.1 points, and imports by 2.7 points. The following agencies made the biggest contributions by volume to the overfulfillment of export goals: the Federal Ministry of Metallurgy and Heavy Engineering, the Federal Ministry of General Engineering, the Federal Ministry of Fuels and Energy, the CSR Ministry of Construction, the wood-processing branches of industry of both Ministries of Industry, and others. Some ministries, such as the Federal Ministry of the Electrotechnical Industry, the branches of the CSR light industry, the CSR Ministry of Health, and the SSR Ministry of Health, remained below the level of the plan. Some deliveries of an inventory nature, mainly in the field of machinery and equipment, including spare parts, will be carried over to 1985. In non-machinery exports, it will be necessary in the first quarter of 1985 to make up deliveries owed in capital project furnishings and footwear.

In 1984 there were very favorable developments in mutually advantageous trade relations with the Chinese People's Republic. The signing of an intergovernmental agreement, including an appendix, in August 1984 made possible a rapid growth in turnover by more than one-half. By stressing exports over imports, funds were created for the importation of interesting Chinese goods, both for production consumption and for the popular market.

In relation to the nonsocialist countries, the predicted rate of exports was exceeded by 2.9 points, even though the expected improvement in the world economic situation did not take place. It is gratifying that of the intentions of the state plan, we succeeded in achieving a growth rate in exports of almost 3 points for the light industry branches of the CRS and the SSR as a whole. On the other hand, we failed completely to reach the planned level of exporting engineering products.

Exceeding the overall export goals has a positive effect on the balance of trade in relation to the nonsocialist countries.

A positive feature in fulfillment of the tasks of external relations in 1984 was also a certain improvement in the orders covering exports in the course of the entire year and a more balanced fulfillment of the export tasks in the individual quarters.

In order to correct some deficiencies and achieve an overall improvement in further work by the foreign trade organization, the ministry leadership took a number of actions which were discussed with the general managers at the conference with the minister of foreign trade on 1 February of this year.

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CSO: 2400/307

HUNGARY

## MAJOR CROP PRODUCTION SYSTEMS HIGHLIGHT RESULTS

### Nadudvar Crop Production System

Budapest MAGYAR MEZOGAZDASAG in Hungarian No 11, 13 Mar 58 p 4

[Article by reporter Avar: "Arguing, But in Mutual Agreement Regarding the Future"]

[Text] The Nadudvar KITE [Corn and Industrial Crop Growing Cooperation] held its general meeting on 1 March. Istvan Szabo chaired the meeting. Lajos Faluvegi, deputy premier and chairman of the National Planning Office, also attended. Csaba Balogh, the production system's director, orally amplified the written report.

Last year the Nadudvar production system closed its 12th farm year. As we have reported on several occasions, the crop production integrated by KITE attained results that exceed the national averages. Despite the recurring droughts, for example, the average yield of winter wheat on 369,000 hectares was 5.61 metric tons, and the average corn yield on 238,000 hectares was 6.47 metric tons. These are nice results. However, the director deemed it necessary to emphasize that, in addition to natural calamities, also professional mistakes and shortcomings hampered the production system in attaining even higher yields. Among other things, the fact that on more than a quarter of the total area under cereals the stalk density was less than required supports this self-critical statement. And it likewise provides food for thought that varying degrees of weed infestation on more than a third of the area also reduced the yields.

On the other hand, many of the requirements or objectives formulated earlier have been fulfilled. For example, the policy on varieties in recent years, and the switching of varieties on such a large scale, have clearly proven sound. Similarly as in the case of wheat, the technology and biological stock are outstanding in the case of corn as well. But the stalk density on a third of the area was below 65,000 per hectare, and therefore it is not surprising that the average yield on this area was below 5 metric tons per hectare. On the rest of the area under corn, of course, the results were more meaningful, with an average yield of 7.0 metric tons per hectare. Weed infestation of the corn crop still remains a problem. Between 40 and 50 percent of the area was infested to some extent. KITE estimates that 1,190 kilograms of shelled corn was lost because of this per hectare.

Problems and shortcomings hampered the proper maintenance of soil fertility. The quality of manufactured fertilizers is not likely to change for the time being. The problems of quantity stemmed from the economic situation and a lack of funds. KITE is able and willing to help solve the difficulties, but cannot remedy them completely.

The other crops present a varied picture. The area under sugar beets, for example, has declined while the beet yield has increased in comparison with the past. This crop is causing more problems than the others, despite an average of 6.48 metric tons of sugar per hectare last year.

The area under sunflower has increased, but the average yield of sunflower seed per hectare has declined. However, we were glad to hear that the procurement of oil seed proceeded smoothly last year, which is attributed primarily to the improving relations among the partners.

The potato yields are almost unbelievable, but the rice yields are below the customary level of years past. KITE experts claim that they have been able to avoid even more serious problems only through the technological development that has been proceeding consistently for years.

The green-pea yields are encouraging both the production system and the partner farms to enlarge the acreage. Development of the production of grass seed and leguminous forage seeds has been arrested, but seed production for export has expanded spectacularly.

Among the services, perhaps consulting is the most striking. The relationship between the consultant and the farms' specialists produces unambiguously tangible results. The importance of consulting is enhanced by the fact that the consultants are the vehicles of the annually expanding store of knowledge whose purposeful utilization makes the application of modern production methods and equipment more effective.

From the very beginning KITE has subscribed to the basic principle that professional relations must be a living bond in which the independence of the [partner farms as] owners is fully respected. This smoothly functioning system of relations makes possible a more and more complete flow of information that is also the key to renewal.

Csaba Balogh in his report reviewed the road that the cooperation has traveled since its formation. Today it is clearly evident that what was regarded as new in the development of technology, equipment and services at the time of the co-operation's formation is now practical reality. The big question for KITE regarding its future is whether it will be able to continue to adjust to the changing conditions. Earlier the decision to combine the production of different crops proved sound, and now KITE is advocating the primacy of grain production. In addition to goals in terms of yield, higher profitability now plays a leading role, making KITE operations more complex. Farm-management services will be the most tangible ways of enhancing profitable operation on each farm. The objective that KITE has set for itself in this area is the elaboration of modern planning and analytical methods, and the spreading of computer applications in agriculture. Realization of this objective has already begun, and KITE hopes to advance further in its expected fulfillment.

In his speech Lajos Faluvagi spoke first about the national balance, the possibilities of the farms and the activity of KITE.

In spite of the difficulties and problems, he said, we would be able to attain a faster growth rate of production in 1985 than earlier. This year we were reaching a threshold from which we would be able to advance vigorously in production. Due to the exceptional cold spell at the beginning of the year, a difficult situation had developed in agriculture as well. It could be said that the workers in the hothouses, livestock production and elsewhere had worked very hard under these conditions. Their experience and conscientious dedication had been of great help, for which they deserved recognition.

So far as international comparisons of our agriculture were concerned, grain production was competitive in terms of both yield and cost. Unfortunately, the same could not be said of livestock production or of other crops. During the past 15 years, a performance gap had developed between the two principal branches of farming, and this was evident in the level of costs, profitability and the market's value judgment as well.

Even more intensive and efficient farming had to play a greater role in the realization of our plans. We all were familiar with the increased requirements, and also knew that these requirements could not be met under the old conditions. Therefore we would maintain the incentive built into the producer prices. In the coming years we were expecting a moderate rise of energy prices, and a more substantial rise in the prices of materials supplied by industry.

The experience of recent years proved that the management and members of KITE knew what had to be done and how. Fulfillment of the agricultural sector's targets under the 6th Five-Year Plan could be attributed, in addition to the farms' own efforts, also to the production systems, among them KITE. It would be mutually advantageous if in the future the production systems, including KITE, were to exert more influence than in the past on the domestic machine industry, in the interest of producing a wider assortment of farm machinery of better quality, better able to meet the increased requirements.

We would like to create favorable conditions for further training, but for this also the farms' efforts were necessary, because without them we would be unable to make any headway. The deputy premier emphasized that only our own work could ensure our further development.

#### Babolna Corn Production System

Budapest MAGYAR MEZOGAZDASAG in Hungarian No 11, 13 Mar 85 pp 4-5

[Article by reporter Gyulai: "Economically Efficient Higher Yields"]

[Text] At its general meeting on 1 March in Babolna, the management committee of IKR [Industry-Type Corn Production System] drew up a balance of production on the nearly 560,000 hectares belonging to the 257 member farms. Dr Robert Burgert, the management committee's chairman, welcomed the representatives of the member farms and the invited guests, among them Minister Jeno Vancsa, and Gyula Poden, a section chief of the MSZMP Central Committee.

Dr Janos Toth, the director of IKR, orally amplified his 1984 annual report. Commenting on the production and business results, he noted that the member farms had grown corn on 212,867 hectares. In autumn they had been able to harvest 202,334 hectares as shelled corn, while the drought had made the corn on 10,533 hectares in Csongrad, Bacs, Szolnok and Gyor-Sopron megyes suitable only for silage. The attained average yield, 6,795 kilograms per hectare, was 366 kilograms below the planned average. During the growing season the corn had developed slower than in preceding year, and there had also been pesticide damage on a large part of the area under corn.

Lack of rain and cool weather during the critical months had lengthened the growing season and, as a result, had increased the costs of drying the harvested corn. Because of the high moisture content, the available drying capacity had proven inadequate. The situation had been made worse by the decline in the capacity of the converted dryers. To compensate for this, air at a temperature of 130-140°C had been used for drying, and this had detracted from the quality of the dried corn. In spite of all this, the quantity of corn stored without drying had increased.

At the same time, however, there were also outstanding average yields. Thus 62 of the member farms averaged more than 8 metric tons per hectare, on 32 percent of the combined total area under corn. There were also seven top-ranking IKR member farms with average yields exceeding 10 metric tons per hectare. And 80 of the member farms had average yields between 6 and 8 metric tons per hectare.

In a breakdown by fields, the joint enterprise had gathered and processed on a computer the data on the technology employed last year, and the printouts were being sent to the member farms. It would be advisable to utilize during the spring chores the conclusions that could be drawn from these analyses.

The weather had been more favorable for the production of winter wheat, due in part to its different growing season. The combined total area under winter wheat on the farms participating in the integration had been 231,000 hectares, 12 percent more than planned. The average wheat yield on this area had been 5,646 kg, 602 kg more than the 5,044 kg planned.

Overall the member farms had fulfilled their obligations under the program for the development of grain production, producing 120,000 metric tons of grain in excess of the plan.

The IKR member farms' combined total area under sunflower had been 30,489 hectares; and their average yield, 2,144 kilograms of sunflower seed per hectare. This was 90 kilograms less than planned, but could be rated as good in view of the weather conditions during the growing season.

On the 15,252 hectares of sugar beets the average yield had been 40.65 metric tons of beets containing 15.76 percent sugar. That was the equivalent of 6,445 kilograms of sugar per hectare, 98 kilograms more than had been planned.

In 1984, the production system's Czechoslovak partners had grown corn using IKR technology on 59 farms in 10 okreses. The level of production had risen particularly in Central and East Slovakia krajs. Here eight of the 22 new



farms joining the production system had exceeded their average yields for the past five years by 2 metric tons already the first year of their participation.

IKR's income from basic services had exceeded the planned income by 4.29 percent. The planned income from machinery rentals had been achieved with a mix of machinery well suited to the system. For example, 204 Claas Dominator-106 grain combines, 127 corn drills, 120 Fiat-1880 tractors, 46 Raba-450 tractors, and 700 various machines and implements had been supplied to the member farms.

Regarding the plans for 1985, the rising production costs were the biggest problem, because the price increases were raising the average production cost per hectare by the equivalent of 466 kilograms of corn. Thus the break-even point would increase from 5,987 kilograms per hectare last year, to 6,453 kg this year. Under the different production conditions, this could push corn production into the red, unless the technological elements are found that could significantly reduce the cost without lowering, and perhaps even increasing, the yield.

At the partial general meetings, several of the partners had indicated that they would be using less manufactured fertilizer and plant protectants, and perhaps would dispense with soil fumigation entirely. This could result in a production dropout greater than the cost reduction, which would increase the loss instead of reducing it. Therefore the enterprise was recommending that the member farms' specialists, in the course of adapting to the new production conditions, should carefully weigh their decision regarding the use of fertilizers and plant protectants. Where the higher production costs were accompanied by higher yields, and hence by an increase in the profit per hectare, it would be advisable to maintain or even increase the inputs of these materials. A reduction of the area under corn was not warranted, all the more so because this year's national economic plan called for a 3-percent increase of the area under grain, including a 6-percent increase of the area under corn.

Minister Jenő Vancsa analyzed in his speech agriculture's development during the past four years. As a result of grain production's dynamic development, he said, the four-year average wheat yield had been 4.57 metric tons per hectare; and that of corn, 6.1 metric tons. Last year's grain yield also meant that we had fulfilled the target set for the last year of the 6th Five-Year Plan.

The minister rated as very significant the IKR member farms' results in grain production, and the fact that they were supplying nearly a fifth of the country's grain harvest. In accordance with agriculture's plans, the production system's member farms had increased substantially their area under cereals. It was essential that this year they seed the planned area to corn. In this respect, just as in the other areas of farming, the member farms' demands on the joint enterprise were increasing. Specifically the joint enterprise's efforts to meet these increased demands ever better could secure the members' further successes.



## Baja Corn Production System

Budapest MAGYAR MEZOGAZDASAG in Hungarian No 11, 13 Mar 85 pp 5

[Article by reporter Gallai: "New Opportunities as the Joint Developmental Enterprise"]

[Text] The Baja Corn Production System or BKR, reorganized two years ago as a joint enterprise, closed 1984 successfully. This is the more noteworthy because the production system's partner farms attained above-average yields under conditions of farming less favorable than the average in Hungary. The average yields per hectare of the production system, which farms about 200,000 hectares, were 5.45 metric tons for winter wheat, and 6.59 metric tons for corn. Thus it can be said that the crop yields have stabilized, despite the drought.

Last year, 32 of BKR's 153 member farms joined the Intensive Grain Production Program, pledging to produce 40,000 additional metric tons of grain. Under participation in this program, one of the main advantages of which is the support it provides in supplying the farms with machinery, BKR is helping its member farms to perform all field chores at the optimal time and in the best possible quality, through the organized renting or placement of machinery.

According to Dr Lorinc Matos, BKR's director, the supply of technology and equipment is the alpha and omega of production. And quick repairs necessary for the operation of the machinery are the basis for utilizing the inherent advantages of mechanization. BKR now has a service network that is able to complete warranty repairs on machinery within 24 hours. There are 10 trucks with diagnostic equipment to aid this work. Ever-closer cooperation with the manufacturers, and an increase of 3.0 million forints in BKR's circulating capital this year, are helping to improve the supply of parts. And one more item of information: there are now nine satellite warehouses to ease the shortage of parts.

With due consideration for more professional maintenance of soil fertility, two new suspension-fertilizer plants have been built. BKR contributed 3.0 million forints to the plant of the Lenin Cooperative in Melykut, and 1.0 million to the plant of the Aranykalasz Cooperative in Kocs. It is related mainly to the management of soil fertility that field-specific technologies are now available for 13 crops. Speaking of investments and cooperation, we should mention that a total of 15 million forints has been earmarked for this purpose in 1985.

At the meeting of the BKR management committee held to consider the annual report and the 1985 plan, it was announced that as of this year the system would be operating as the Joint Developmental Enterprise (Fejlesztő Kozos Vallalat). In the opinion of the management committee, the new organizational form will provide more room for developmental engineering work and the addition of new areas of activity, besides the production system's traditional activities. One new area of activity is the production system's export, which BKR would like to expand next year. Last year, BKR grew corn with its production system on several thousand hectares in Czechoslovakia. The fact that the work will be continuing this year on a larger area is proof of the quality of the

attained results. BKR intends to expand its relations in other regions and countries and for other crops as well. But to do so, it must improve its marketing. Specifically for this purpose, the Interpress Enterprise has become a member of the production system as of this year and has undertaken to do BKR's market research. To ensure that the Joint Developmental Enterprise will be sufficiently strong financially, it was decided to distribute only 40 percent of the annual profit among the partners, and to use the rest for the production system's development and the expansion of its services.

Dr Imre Kovacs, deputy chief of the MSZMP Central Committee's Economic Policy Department, attended the management committee's meeting. In his speech he emphasized that also BKR, two years after its reorganization, had played an important role in agriculture's ability to meet its objectives, in domestic supply and export as well. There would be continued need for the Baja Production System's steadfast operations to fulfill agriculture's further plans.

At this year's Agriculture and Food Industry Fair, BKR will be exhibiting three machines that still count as novelties on many farms. One is a wick-type herbicide applicator that saves herbicide. The wicks saturated with herbicide dab the herbicide directly onto the weeds, thus ensuring that every drop is used effectively. The second machine is the BS 20/2 husk scarifier. Savings of 15 to 20 percent in energy consumption are possible if it is used before drying the corn. A new addition to the system of machines for growing corn is a corn-stubble shredder that makes for smoother tillage and also increases the organic matter content of the soil.

1014  
CSO: 2500/329

HUNGARY

DANES WISH ROLE IN WORLD BANK-HUNGARY AGRICULTURAL PROJECT

Copenhagen BERLINGSKE TIDENDE in Danish 19 Apr 85 Sect III p 5

[Article by Bo Jørgensen: "Hungary Getting Five Hundred Million Kroner Worth of Danish Food Technology"]

[Text] The Industry Council regards it as realistic that Denmark will be able to get a share of, in any case, 10 to 15 percent of the \$325-million-total gigantic Hungarian modernization project from now to 1989.

Danish industry is considered to be able to export at least 500 million kroner worth of agricultural equipment to Hungary from now to the end of 1989 in connection with a gigantic modernization project for a total of \$325 million--about 3.5 billion Danish kroner. The Hungarian government wants to modernize major sections of the country's food industry in order to increase exports of meat and dairy products to the world market--first and foremost to the USA--and as part of the financing the World Bank has approved a loan of \$80 million for the project.

The plans include a good 200 individual projects. Among other things, expansion of 56 beef cattle farms and of 21 sheep farms is to take place, expansion and reconstruction of 32 pig farms, expansion and modernization of 58 feed mills, modernization of 12 dairy cattle farms, modernization of seven slaughterhouses, and the construction of a new feed plant, a blood meal plant, and a feather processing facility. In addition, a total of nine dairy production facilities are to be constructed and a large amount of equipment is to be replaced in a number of slaughterhouses.

Finally, the project includes the training and education of, among others, slaughterhouse personnel, and here it is expected that the Food School in Roskilde will be able to make a strong show in the international competition for orders.

"Hungary is considered to be 10 to 15 years behind the West European level, technologically speaking, and they are now trying to gain a lead by purchasing West European technology and know-how," says Export Consultant Niels Bak of the Industry Council, which together with the Scandinavian Investment Bank and Privatbanken [The Private Bank] is arranging a seminar on Thursday, 25 April, regarding the projects, for interested Danish firms. Here

representatives of the Hungarian national bank, among others, will review contract opportunities.

"I would think that 99 percent of the necessary technology will be able to be supplied by Danish industry, and we have sent out special invitations to a good 600 different firms with information regarding the Hungarian plans," Niels Bak continues, who regards as realistic a Danish share of, in any case, 10 to 15 percent of the total projects.

#### Good Opportunities for Financing

"We have great faith in the project because Danish industry is quite far ahead technologically in this field, and because financing opportunities are promising," he continues. "The Scandinavian Investment Bank, for example, has given a \$5-million loan to the Hungarians, and for the Scandinavian contractors which come into consideration there will be the opportunity for applying for financial support through the investment bank. The condition here is that there must be a joint venture partner in another Scandinavian country; for example, in the form of a subcontractor."

"Now an effort will be made in the Industry Council to motivate Danish concerns--large as well as small," Niels Bak says. He emphasizes that it is regarded as extremely important that aggressive sales work be displayed by the interested Danish firms, among other things, on account of the fact that great international competition for orders can be expected, among others, from highly specialized Dutch industry.

Great faith is being placed on the projects' profitability on the international plane, among other things, in light of thorough market analyses developed on the initiative of the World Bank. A total of \$150 million have been set aside for purchasing technology and know-how abroad, while the remaining \$175 million will cover local costs in Hungary. Danish exports to Hungary last year equaled 334 million kroner--a 14-percent increase as compared with the year before. A good percentage of total exports is made up of Danish-produced agricultural technology.

8985

CSO: 3613/135

POLAND

# FOREIGN TRADE STATISTICAL YEARBOOK REVIEWED

Warsaw HANDEL ZAGRANICZNY in Polish No 10, 1984 pp 31-32

[Article by M.D.: "1984 Foreign Trade Statistical Yearbook"]

[Text] Within the framework of the series of "Branch Yearbooks" published by the Main Statistical Office [GUS] a yearbook on foreign trade has been issued, marked by the date of the current year (1984),\* which contains the final data from 1983.

The scope and ordering of statistical information presented in the yearbook has not undergone any changes in comparison with the editions from recent years (if one omits small changes in the layout in some tables). Traditionally, the information in the annual has been divided into two sections: Polish foreign trade, collected data (the data in this section is presented in long time-oriented columns); and Polish foreign trade during 1981-1983 (data arranged in goods-country and country-goods categories).

From the collective data (tables 1 and 2) it is evident that in 1983 export closed with a value of 1,061.2 billion zlotys, while import was at 970.2 billion zlotys. This indicates that in comparison with 1982 exports, at current prices, rose by 11.5 percent, and imports at the same prices, by 11.7 percent. The growth of trade at fixed prices was slower, with export growing by 10.3 percent and import by only 5.2 percent. The differences between the growth in the volume of import and export resulted from a greater growth in prices for imported goods (by 5.3 percent) than for export goods (1.1 percent), which indicates unfavorable terms of trade. It is worth noticing that in 1983 the annual decrease of import was halted, and this includes capitalist countries. Though in fact we have not reached the level of foreign trade turnover (in fixed prices) of 1980, the tendencies for growth are apparent. For this last piece of information one must look into the Statistical Yearbook for 1984 (the so-called "big book"), because in the Foreign Trade Yearbook the indicators for trade dynamics are calculated on the basis of 1970, or the previous year.

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\* "The Foreign Trade Statistical Yearbook," GUS, series "Branch Yearbook" 20, Warsaw, 1984.

If we were to compare the Foreign Trade Yearbook to other GUS statistical publications, we could see some changes in data in relation to that published in the Small Statistical Yearbook for 1984. The level of trade and the indicator for the changes in its volume are lower according to the Small Yearbook (this concerns mainly trade with socialist countries). It is understandable that data published in the small yearbooks (which appear relatively early) is not final and undergoes further clarification and correction.

Data concerning changes in the volume of trade is the only data given in fixed prices. The remainder, including that concerning geographic distribution and type of goods, are given in current prices. In view of the significant changes in prices on both sides of our foreign trade (and in both geographical areas) and changes in the rates of currency exchange (up to 1981 data is expressed in exchange zlotys), this does not aid the analysis of foreign trade processes in a realistic setting.

Perhaps that is why attention is drawn toward the import (table 12) and export (table 13) data for the more important goods, which are normally expressed in natural units. The tables, for example, inform us that in 1983 we imported 6 billion cubic meters of natural gas, (nearly 400 million cubic meters more than in 1982), 14 million tons of crude oil (of which 12.5 million came from socialist nations), about 13.8 million tons of iron ore (this was significantly less than in 1980), over 53,000 passenger cars (in this 3500 from capitalist countries), household refrigerators and freezers numbered 243,000 (mainly from socialist countries, a 20 percent increase over the previous year), over 3 million tons of phosphorus and apatite, 42,700 tons of natural latex (a little less than in 1982), 2.4 million tons of wheat (or nearly 1.3 tons less than in 1982), 25,900 tons of tea.

In turn we exported, among other things, 35.1 million tons of hard coal (20 million tons more than in 1982), 2.1 million tons of rolled steel, 183,000 tons of copper, 405 tons of silver, 54,000 passenger cars, 222,000 bicycles, about 452,000 DWT of ships (various types), nearly 10 million pairs of leather shoes (about 2.5 times less than in 1980), 300,000 hectoliters of alcohol products. These are only examples of imported and exported goods which came from various divisions and branches.

Important information which has only lately appeared in our statistical yearbooks contains the balance of payments (table 21) and data which illustrate the foreign indebtedness and debt (table 22). These show that the Polish debt is growing in the currencies of socialist nations (261.4 billion zlotys in 1983 versus 254.8 billion zlotys in 1982), as well as in the currencies of capitalist nations (over 2.3 trillion zlotys in 1983 versus 2.1 trillion a zlotys in 1982). The last item (as we are informed by a note under the table) does not include interest for guaranteed credits.

The data cited have been drawn from the first part of the annual. In the second part we can find data concerning the import and export of individual

goods (this list is more complete than in the first part) and the countries which are buying and selling them. This data shows the trade structure between Poland and individual countries which are Poland's trading partners.

The last collection of information in the yearbook (published for the second time) is a listing of units authorized to conduct foreign trade activities. At the middle of 1984 there were 162 such units (a year before there were 134). Even from a casual reading it is apparent that the listing is not exhaustive because it does not include persons who have obtained concessions (though there is no information on this subject in the yearbook). This incompleteness cannot be regarded as a virtue. But the list of units holding concessions is no less valuable because it is the only source of subjective information in the yearbook. But is it not worthwhile to think about broadening the "subjectivness" of the statistical information in future issues of the foreign trade yearbook? This would enrich the (always carefully worked out) collections of information on foreign trade by identifying more closely the sources of export products and the users of imported goods.

12411

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POLAND

## ENGINEERS, ECONOMISTS STILL AT ODDS OVER REFORM

Warsaw PRZEGLAD TECHNICZNY in Polish No 5, 3 Feb 85 pp 14, 15

[Article by Witold Gawron: "The Obstacles Are Still in Place"]

[Text] As far as I can remember, and I'm not a young man, when we write about technical advancement in the PRL its enormous importance to the economy is stressed. Depending on the period, the writings either have a euphoric character and bombard the reader's sensibilities with such picturesque comparisons as "suction pump," "return pressure," etc., telling us that technical progress should be sucked out of the factory and sucked into the laboratory, or have a pessimistic view with the reader being informed about the gigantic gap between American and Polish technology, which is to convince him of the futility of all exertions.

We are living through the latest phase in the continuing discussion which is taking place on the background of the economic reform, with the hopes and fears that it has brought into the engineering-technical community, which has for years tried to introduce some order into technical development, technological progress, and rationalization. It is good that these interested engineers and economists have yet again taken up this subject, and at the same time exposed many of the nonsensical situations which still continue to adorn the national economy.

### The Fruits of Reform

In October 1984 the Chief Technical Organization [NOT] and the Polish Economic Association [PTE] decided to start a dialogue and organized a multihour discussion on the subject "Reform and Technological Progress." The participants included engineers, economists, technicians, theoreticians, scientists, and activists. The introductory speech was given, among others, by Prof Jan Kaczmarek, president of the NOT Main Board, and Prof Zdzislaw Sadowski, the deputy government plenipotentiary for economic reform.

As one would expect, the discussion yielded controversial results. The polarization of positions ran much along the lines of the reform, more specifically, according to its positive and negative effects on the initiation of technological progress in the process of management and production. In this

article it is not possible to present all the ideas which were reflected in the speeches during the discussions, but the more important ones are worth mentioning. They show that even though 3 years have passed since the introduction of the reform, its results, at least in the sphere of speeding up technological progress, are not visible. First, a few comments on the positive effects which in the opinion of the participants are visible and give a favorable forecast for the future.

From the standpoint of technological progress one must count as positive, among other things, the widespread independence of the enterprises, the linking of workforce bonus funds to production results in the enterprise, and also the possibility of independent shaping of wage policy. Going further, export enterprises have limited access to hard currency, and a system of government orders has been introduced which disciplines the conditions of production.

The reform is yielding certain results in implementing technological progress, especially in the formation of new types of organizations which are favorable for introducing technology to production. An example of this is the Merkomp Center for Electronic Research and Development, which functions on the principles of a partnership with limited responsibility, one that links government enterprises, university and polytechnical scientific organizations and PAN [Polish Academy of Sciences] institutes. This partnership connects the elements in the extended research-development-implementation process. An example of another problem is the competition in the sphere of materials management sponsored by the Ministry of Materials Management, the Ministry of Science, Higher Education and Technology, NOT and PTE. It brought in 600 inquiries, testifying to the increase in interest in the possibilities of practical realization of technological progress.

It was also demonstrated that some results can be observed in the sphere of material savings, since overall consumption of materials is very high and limiting it often leads to a drop in the quality of the products, in the sphere of arousing interest for modernizing capital assets, and in the sphere of foreign trade. The reform has had influence in the sphere of wage policy, stopping inflationary pressures and tying them in a motivational way to the growth of production.

In sum, one should conclude that these positive aspects of the reform's functioning do concern important problems but give only superficial results, while deep reserves of social energy are still dormant. The participants in the discussion left no doubt that this is so.

#### A Catalogue of Barriers

There is more pessimism in the opinions of economists, which possibly results from bad experiences during previous attempts at reform, or perhaps from the conviction that the economy in our country is governed by factors that go beyond economics. In the opinions of the engineers and technicians one can

see attempts at illuminating the principles of the reform from the viewpoint of their practical meaning in the broadly understood field of technological progress, which includes organizational progress.

But the opinions of both sides coincide on the question of barriers which slow progress to a speedy exit from the crisis. Discussion on this matter showed many elements of various weight, qualities and breath which are obstacles, in effect creating a home-made catalogue of barriers which not only points out the weaknesses in the economic reform but also shows why it does not and probably will not yield the full effect.

Again here are some of the elements which are directly influencing the lack of technological progress. Cheap labor and irritating disproportions in pay between workers and engineers. As was pointed out, in Poland labor is 5 to 20 percent of the prime costs, while in developed countries it is three times as expensive. Disproportionate pay scales function to counter motivation. It seems that the principle being upheld is one that states that the only just pay must be equal pay.

The role of the bank remains unchanged. In the national economic system it has the position of a monopoly and is the distributor of a centrally designated pool of credits. As was stressed, this position of the bank is contrary to the principles of the reform. Also counter to the idea of reform, as the mass media say, is the built-in and enlarged system of allowances, adjustments, preferences, guaranteed supply, hard currency distribution and the like. The field for bargaining on which economic activities are ranked by their power of penetration rather than by economic rationale thus remains. This is closely linked to the existing financial system, which does not encourage efficiency but instead destroys trust in the role of money and blocks the path for its circulation.

Galloping legislation and a high frequency of changes in the regulations have caused changes in the rules of the economic game. Up to now 500 laws concerning the implementation of the reform have been published. This, of course, universally confirms the belief of the managerial cadres in the enterprises that one still must wait for stabilization in the management system. This creates an uncertainty and disbelief in the effects of activity.

The radical reorientation in the direction of foreign cooperation is another barrier to technological progress. The remainder can be abbreviated; the shortage of reserves, group particularism, the lack of an authentic incentive system, preference of quantity over quality, the breakdown of cooperation, the use of criteria for setting the prices of products, and low economic awareness, organizational backwardness.

This gives rise to the question of whether the realization of the economic reform is sufficient to overcome all these barriers, obstacles, and frequent nonsense, an example of which is the concept of "justified costs." One can have some doubts. Is it possible to propagate technological progress in the

engineering and managerial communities when neither the engineers nor the work force will benefit from it? The introduction of a new product can only cause a decrease in the profits of an enterprise because of the increased expenditure. But it is not possible to reduce the costs by a price increase because one can count on intervention from the Price Office. Such mechanisms, it is plain to see, do not encourage technological progress.

It is estimated that technological progress, that is, its influence on the effectiveness of managing in Poland, is 20 years behind that of the leading nations. There is data which shows that there is, in effect, no technological progress in Poland. The conservatory at the Center for Creative Work of the Association of Polish Mechanical Engineers in Rydzyn supplied materials which confirm this opinion. Among 2000 participating engineers there was the conviction that they are unnecessary to the enterprise, that there is no technological development because there are factors which make possible escape from a difficult situation via maneuvers and wrangling in the realm of the bureaucratic-administrative-organizational system.

#### Instead of Summing Up

The dialogue of engineers and economists begun in the discussion "Reform and Technological Progress" is not an easy undertaking, just like anything that concerns the economy of our nation. From the speeches, however, which were necessarily brief and somewhat chaotic, it can be deduced that there is a common purpose: to make the working world in Poland a rational place. In this I believe is the desire to organize work according to the laws of value, to make it, let us use a strong word, independent. This is the desire to cast off the bureaucratic corset and the artificial justice of the wage system, structures which cripple initiative and mechanisms which stifle motivation.

Is the reform going in this direction? The question is of a rhetorical nature. Prof. Z Sadowski, deputy government plenipotentiary for economic reform, admitted in his speech that in several key places there are still many irrational phenomena. Among other places this is true in the employment structure, in the management of capital assets, in effective enterprises. One can also add that this also applies to wages and prices, the adequacy of the industrial structure in relation to the national base of raw materials, the circulation of money, and other problems.

Is it possible, in this state of things and at this speed, to realize the reform so, that the Polish debt can be paid off in a reasonable time? I fear to say that it is not possible. Possibly someone will get the idea to pay the debts through the utilization of the full Polish economic potential, because export alone even tripled, will not be sufficient.

12411  
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POLAND

#### CONDITION OF WINTER CROPS REPORTED

##### Snow Cover Sufficient

Warsaw TRYBUNA LUDU in Polish 11 Jan 84 pp 1, 2

[Excerpt] The winter crops are under the snow and the farmers are at home. Almost everyone complains about a severe winter. Meanwhile, the farmers who usually lead the grumbling against the weather are strangely silent this time. The reason is they have no cause to complain. The cold and snow are really the allies of agriculture at this time of year.

The winter crops are safe under a snow quilt and snow covers the entire country. The low temperatures are hardening the crops and also serve to kill off various pests to grain, potatoes and apples perhaps more effectively than any chemical.

##### Effects of Weather

Warsaw ZYCIE WARSZAWY in Polish 21 Jan 85 pp 1, 2

[Article by (mp): "Winter in the Fields and on the Farms"]

[Text] Although it is not the case every year, a severe winter is not an exceptional occurrence in Poland. It is only in recent years that we have had several mild winters.

However, cold, somewhat more severe than normal, did arrive and we are already beginning to worry. Just there was once such a large number of doctors among us, so now almost everyone is a farmer, and it is not surprising that there are many who are distressed that winter crops might freeze, domestic animals fail to survive, and the current weather harm next year's harvests.

There is currently no deep covering of snow on the fields. People believe that there is about 10 centimeters of snow covering the crops. There is not a great deal, but the experts believe that it should be enough to protect the winter cereals from freezing. We cultivate types of grain which are resistant to even low temperatures. It is good that the frost came a bit earlier than the snow. When the soil beneath the snow is frozen, the crops survive the winter better. The most delicate winter plant is rape. Approximately 500,000 hectares have been planted with rape this year. How well it has survived the winter only the spring can tell, but the crop types we plant should be able to survive even

without a snow cover to minus 20 degrees; beneath the snow they should be able to withstand even lower temperatures. In this situation, it is important that the snow falls on frozen soil; otherwise, the plants' resistance to the frost would be less. Early spring ground frost is the most threatening to these plants, especially when the snow melts and the plants begin to germinate. Then, even the mildest frosts can cause huge losses.

Low temperatures also should not damage orchards. The majority of fruit trees are resistant to such frosts, only peach and apricot trees can feel the drop in temperature. Not even the severest frosts should damage earth mounds in which potatoes, carrots, cabbage and other vegetables are preserved. This preservation technique is traced back to the time when winters were considerably colder; in fact, when the earth mound was properly constructed, nothing was supposed to be able to harm the vegetables preserved therein, especially where there is just a bit of snow covering. Obviously however, the farmers were satisfied when the snowfall was more abundant. Heavier snowfalls would provide better protection for the wintering plants and, what is more important, would provide the necessary moisture in spring. Recently, this moisture has been almost lacking.

Frost can also please farmers. Low temperatures are a natural agent against all kinds of pests and their wintering forms and against various disease--carrying organisms; in a word, the cold is an effective natural pesticide. Perhaps this year we will not have to fear the Colorado beetle. It also does not like the frost.

Frost does not cause major problems for farms. Cattle purchases are somewhat smaller than a year ago, they amount to 5,000-6,000 tons daily. It should not be surprising that people are less inclined to leave home when it is cold. Milk purchases exceed 20 million liters and are sufficient to supply the market. However, animals consume more fodder when it is very cold. Cow-sheds and pigsties are only rarely heated, even a portion of the feed meant for the animals is used for heating.

Farm chickens do not have such problems. The large poultry houses are heated and the chickens are unaware of what is happening outside. Recently, there were problems with feed; this is probably the reason why egg deliveries are somewhat smaller than a year ago. At the Poldrob enterprises, one of the four major egg market suppliers, the difference between last year's deliveries and this year's amounted to approximately 10 million eggs less for the first 2 weeks of January.

The greatest decline in egg deliveries was noted with peasant farms. Those chickens do not have the comfortable situation enjoyed by farm chickens. They lay fewer eggs. Purchases from peasant farms are almost 300 percent less than in 1984.

## Some Crop Losses Anticipated

Warsaw RZECZPOSPOLITA in Polish 16-17 Feb 85 pp 1, 5

[Article by (beta): "A Lack of Imagination and Foresight, But No Calamity"]

[Text] Winter crops are not faring well during this severe winter. Indeed, right now it is hard to judge with complete certainty how much of an effect the cold will have on this year's grain harvest, but we have to reckon with definite losses of rape and winter barley.

The basic threat facing these crops is not so much the steep drop in temperature as much as the lack of sufficient snow cover for protection against the winter. Particularly in the areas of rape and winter barley cultivation, i.e., in the west and northwest of the country, this covering is the least: from 1 to 10 centimeters. Fortunately, the fall last year experienced a light drought and there is little moisture in the plants' roots; for this reason, they are less likely to freeze.

It is not so much the frost as it is the lack of foresight and imagination which leads to the problems of gardeners and fruit-growers. Not all farmers become concerned with fuel reserves in time. Although we cannot use the words calamity or catastrophe in this instance, it is also for this reason that we must reckon with a certain delay of almost 2 weeks in the delivery of vegetables from greenhouses to market. It was also a lack of foresight on the part of a number of fruit-growers who did not paint the trunks of fruit trees with white paint or lime; they can begin to worry about the outbreak on their trees' bark of so-called gangrenous wounds, which threaten to make the trees more susceptible to illness and even death. Peach and apricot trees are most sensitive to frost, as well as several species of pears, apples and cherries. However, in the opinion of specialists from the Center of Fruit-Growing and Apiarian Cooperatives, there is currently no justification for worrying about the size and quality of this year's fruit harvests. Far more threatening than February's cold, however, are the abrupt changes in temperature during March.

Winter can also bring benefits: there is the possibility of the dying out or at least the reduction in the number of pests, e.g., Colorado beetles or powdery mildew on apples, and a limitation of the threat of illness for plants when they germinate. Unfortunately, coal tits, friends of the orchards and gardens, also perish in this cold. Keeping the number of these birds constant is helpful in the protection of fruit trees from pests, primarily in house and allotment gardens. For this reason, it is not sensible for some housing cooperatives to forbid the occupants thereof to feed the birds. This is something which really hurts them in the end.



## Disposition of Damaged Rape

Warsaw CHLOPSKA DROGA in Polish 24 Feb 85 p 12

[Article by Jan Higersberger: "When Spring Arrives"]

[Text] The late harvests of 1984 were cause for various worries in agriculture, including the feeling that winter rape was planted generally too late. It was planted late and encountered the winter insufficiently developed and weak. Weak crops are susceptible to damage even through relatively weak frosts. Additionally, as spring approaches, there are also great fluctuations in temperatures exceeding 20 degrees ( $+10^{\circ}$  C and higher during a sunny day and  $10^{\circ}$  C and lower at night). These fluctuations, already a threat to well-developed and the well-rooted rape, are most harmful to those plants which are sickly or poorly rooted. For this reason, more than one farmer will face the decision in spring either to plough up the rape because it froze, or to leave it alone because it "might save itself."

The answer to this question is a difficult one. In presenting the facts, I want to orient readers to how they should act once their rape plots cause them to have doubts.

Rape is one of the most profitable field crops; it is not necessary to make a rather hasty decision to plough it up. If only the green parts of the plant succumb but the root neck and main root are healthy, the plant will rejuvenate, the rape will "recoup" and provide a normal yield. It is sufficient if there are 35-40 plants with healthy root necks and main roots per square meter.

In wanting to determine whether the root necks and main roots are healthy, one should not rely on whether the plant comes out of the ground easily or not. Sometimes, healthy plants can be easily pulled from the ground, while frozen ones hold fast. It is also easy to pull both healthy and frozen plants from damp, strongly molded and compact soil. In dense soil, both live and dead plants hold fast in the early spring.

One has to react differently: the plants have to be dug out of the ground carefully with their roots, then the main root and root neck have to be torn lengthwise with the fingernails. If the roots are white and the insides thereof are not a bronze color, the rape is healthy and will recoup. even though all of its leaves have frozen off. This test should not be made too soon, inasmuch as the frozen roots and root necks may not yet have had a chance to turn bronze. This should be done only after vegetation has begun to grow.

If it turns out that there are 35-40 plants per square meter, the rape should be left alone, if there are fewer plants per square meter, the rape should be ploughed up and the field prepared for spring sowing.

Sometimes it happens that the cold kills not only all the leaves, but even the main shoot and the root remains healthy. Such rape rejuvenates (recoups) and puts out offshoots. But when this is the case, the yield is 40 to 50 percent less than from a normal plant. Additionally, the plants mature unequally. Such rape is better ploughed up.

We need only to discuss what we should sow in the event we plough up the rape. The following brief advice is given:

If the rape was sown in stable fertilizer, the field can then be used for sugar or fodder beets and beets, cabbage, fodder and corn. Spring wheat or oats can also be sown. Spring barley should not be sown, inasmuch as the ground in this case would be too strong for it.

If, on the other hand, the rape came after grains, grasses or other non-fabaceae plants and fertilizer were not used, it would be most efficient to fertilize the field and plant it with potatoes or corn for a harvest of green forage. In this situation, one can also sow a mixture of leguminous and cereal crops for green forage. Fertilizer may or may not be added.

In any case, one can sow any spring seed, including millet, mustard, spring rape, etc., after winter rape has been ploughed up.

12247  
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POLAND

## MEATPACKERS CONFERENCE HIGHLIGHTS INDUSTRY PROBLEMS

Warsaw PRZEMYSŁ SPOŻYWCZY in Polish No 10, Oct 84 pp 394, 395

[Article by (lek) : "A Technical-Scientific Conference in Koszalin"]

[Text] In May 1984 a technical-scientific conference took place in Koszalin. It was organized by the SITSpoz Meat Processing Industry Section. In the deliberations, which were led by Engineer Lechoslaw Chocieszynski, there were 64 participants from all over the nation. As an introduction to the discussion two reports were given: "Experiences in the Activation and Utilization of the Meat Processing Plant in Koszalin" (by Engineer L. Chocieszynski) and "New Meat Processing Plants in Poland in View of the Latest Techniques and Technology in the World" (Engineer A. Gorski). The first report discussed the 10-year achievement at the Koszalin Meat Processing Plant, the problems in utilization which resulted from errors in design and construction, and the difficulties in reaching the projected production capacity. The second report outlined the differences which appear between Polish meat processing plants and those in leading nations. The matter of installing machines and equipment in the plants was addressed, as were the problems connected with internal transport, the use of information systems, problems in protecting the environment, and problems in construction and installation.

Speaking during the discussion, Engineer R. Gajewski from Szczecin shared his construction experiences from the Meat Packing Plant at Szczecin-Dabie. Among the biggest defects he listed: a badly designed sewer network, the use of domestic machinery instead of the planned imported machines, a badly profiled scalding in the hog slaughter line, a badly working washer (did not wash the rear legs), badly designed hide stripper, and a failure-prone internal transport roller conveyor (the rollers broke and fell out).

Dr J. Graxz from Poznan concluded that all defects at the moment of turning the meat processing plants over for use are the fault of the entire investment system, in which there is no responsibility in the form of supervision by the designers. He proposed the formation of an institution which would conduct entire investment projects, from inception to startup. It would aim to compile a catalogue of all the technical-technological and sanitary specifications for all the divisions in the meat processing plants. He considered the idea of using only imported machines to be a point for discussion. There are some possibilities for improvements in domestic machines. He also proposed the formation of a post-graduate design program.

Engineer M. Malinowski from Ostroda presented problems connected with the use of "imported" machinery. He discussed in detail the management of waste water in the flour producing division, where mechanical and chemical purification systems are used (a flotator which gives a reduction of 30 to 50 percent). He concluded by saying that his enterprise is interested in introducing solutions through the use of new technology and equipment. To accomplish this it would be necessary to establish an implementation fund for utilizing prototype machines and equipment. Prof Z. Duda concluded that in evaluating the meat processing plants imported during the 1970's one should remember that they used new technology which revolutionized, among other things, the use of raw meat materials. These investments also permitted the gathering of experience and the training of cadres. The investment cycle for these plants was shorter than for similar domestic plants. In a later part of his speech he stated that among the engineering-technical cadres there appeared the phenomenon of resisting anything new. They had too tight a grip on those things that were old and proven, for example, no one outside Poznan approached the subject of restructuring beef meat tissue.

Engineer M. Strakowski from Zielona Gora gave a brief description of a meat processing plant that was acquired through import. He pointed out some of the more interesting engineering solutions not found in other processing plants. The building is a multistory structure (slaughter on the ground floor, dismemberment and cleaning upstairs). Moreover, there is a high degree of automation in the hog slaughter line (hide strippers are linked with automatic dismemberment, automatic circular saws are ganged to cut the carcass, automatic interconnection into the production line).

In the framework of the conference, the Koszalin Meat Processing Plant and the Mscice Grain Milling Combine were toured. The hosts did not forget to organize free time for the conference participants. For preparing the conference and their hospitality the hosts, the Regional Enterprise of the Meat Processing Industry in Koszalin and its SITSpoz enterprise group, deserve words of thanks and recognition.

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POLAND

GORZOW GOVERNOR DISCUSSES AGRICULTURE, RELATED PROBLEMS

Warsaw CHLOPSKA DROGA in Polish No 6, 10 Feb 85 p 5

[Interview with Stanislaw Nowak, governor of Gorzow Province by Lech Zycki:  
"Is It Easy to Be a Governor?"; place and date not specified]

[Text] First, an explanation. The question is only seemingly rhetorical. Second, it will not hurt us to know what kind of problems confront the governor. And finally, third, since we know the governor from his office, let us also become acquainted with his rationale pertaining to carrying out such a high function in the administration.

Mr. Stanislaw Nowak, the Gorzow governor, did not avoid the interview, which, I believe, earned him the gratitude of the readers of CHLOPSKA DROGA. The personality of a man behind a desk is perceived differently than it is in an interview with him about himself and his problems.

[Question] Perhaps a word about the province.

[Answer] I will begin, if I may, with 1975 when Gorzow Province was created from areas of former Zielona Gora, Poznan and Szczecin Provinces; Gorzow Province has an area of 850,000 square kilometers. We are, therefore, one of the larger provinces. We are also heavily forested, as much as 44 percent of the area of the province being in forest.

It is understandable that serious difficulties arose at the beginning; simultaneously we had to organize the administration, integrate the population, and equalize the disproportion between some cities and settlements. Let us remember that we were given the border territories of three old provinces, and you know how it is with administrative and management peripheries, as a rule they are underinvested.

[Question] What then is the character of Gorzow Province?

[Answer] Demographically we are a young region since as much as 43 percent of the residents of the province are under 25 years of age. This is a very important fact, decisive with respect to the present and the future of Gorzow. And it also adds to the problems, primarily housing; it is a great headache!

The character of the province? We make up an agricultural-industrial region with a developed tourist function. We have 703 lakes with a surface of 25,000 hectares, and if you add the forests, then you have the picture. This has its bright spots and its shadows: on the one hand, it promotes the development of tourism, and on the other, this destroys the environment. These are two trends that cannot be reconciled; nevertheless we must reconcile them.

Gorzow agriculture is marked by a high degree of socialization, more than 65 percent of the cultivated land belongs to state farms and agricultural production cooperatives. We have 18 large industrial combines and agricultural enterprises which are getting increasingly better results.

Productivity of the four basic grains on private farms reached 32 quintals per hectare in the past year, and on socialized farms, almost 35 quintals. We noted the poorest production in the group of small producers or peasant-workers.

As far as industry is concerned, the chemical industry is in first place since it comprises as much as 27 percent of total production of the province; the food industry is second. Also significant are the wood-paper industry, light industry, and machine industry.

[Question] And the most serious problems.

[Answer] First of all, the management of the Notec River valley, a very large area on the border of the Gorzow, Pila and Bydgoszcz Provinces. There was at one time a government program for management of this valley since the matter is beyond local capability, but it ended with expectations. For this reason we ourselves had to undertake this investment to the extent that we could, as one might understand.

We have already attained some results, mainly in embankments and water regulation. Let us admit, however, that it is a modest beginning. We lack resources, consequently we accumulate funds during the year for a single purpose. Thus, in 1983, we fulfilled the improvement plan by 150 percent; the same thing happened in the past year. We must proceed in this way since in the management of this valley we, and not we alone, see a great opportunity, substantial agricultural reserves for Gorzow Province.

And since we are speaking about this, I would like to add that we have certain State Land Fund land reserves that have not been fully exploited. This pertains particularly to agricultural areas of production cooperatives; it is just for this reason that we are making an effort to organize state farms in the Drezdenko region. We have a favorable situation in the agricultural ministry and are petitioning for release of adequate funds for this purpose. When this happens, an additional 5,000 hectares will be cultivated.

[Question] I represent a weekly that covers the Polish village, so perhaps you might say something more about agriculture.

[Answer] As I have said, we do not have the worst harvests of grains, but we do not take this as the upper limit of our potential. Recently I visited neighbors in Frankfurt who have similar soil and climate conditions, but a more advanced technology and, what is of immeasurable importance, appropriate greater expenditures of money for agriculture than we do. It is not surprising that they harvest 40 quintals per hectare. Do you find this comparison disturbing?

As to animal husbandry, in our province, as in the country as a whole, there has been a drop in numbers of cattle, but we are coming out of the hole and are building up the herd. It is characteristic that despite the smaller number of cows, milk purchases have increased by eight percent. This indicates a higher milk production by the cows in all agricultural sectors.

We are meeting or even exceeding the quota for livestock purchases. In comparison with 1983, we note a five-percent increase. In this regard we are one of the few provinces in the country that attained such purchase results.

Most important, however, is the fact that we depend on our own fodder. At the beginning, and there is no reason to hide this, we had difficulties in this area. At present, the situation is much better than in 1981 or 1979 when we were building large animal farms and depending exclusively on fodder from state stores.

[Question] The agricultural-food industry is linked to agriculture.

[Answer] Of course! It is 22 percent of the total production of the province. That's a fact! We could produce significantly more if we had a processing capability. For example, we are buying 30,000 tons of sugar beets in order to transport them 20 or even 30 km to processing plants in other provinces. Meanwhile we could be buying up to a half million tons. This is an unexploited opportunity! Also, the losses; I have in mind the beet pulp. Before it is loaded in the processing plants, it is brought in and unloaded and is already fermented. We have to have our own sugar factory.

The situation is the same with the construction of an elevator. This year, for instance, we bought 146,000 tons of food grains, excluding brewer's barley and seed grain. We have no place to store the rest. The farmers will begin to accuse us of causing a crisis in the harvest, and apparently with good reason. Both of these investments are indispensable to the province!

[Question] And the most important question: is it easy to be the governor of Gorzow Province?

[Answer] Mr. Editor! It was never easy, and today it is especially difficult. I will openly state that there is a shortage of almost everything. Meanwhile the people demand a resolution of all the problems that disturb



them. The people are right, but where is the governor to get the means to meet even the most essential needs? Moreover, it is not just a matter of finances!

[Question] In that case, what is it that especially causes the governor sleepless nights?

[Answer] HOUSING! Please print this in capital letters! In this respect we have not attained the results of 1979, let alone 1978. We are far from that. Also, in order to meet expectations, we decided on development of single-family housing; we even developed a catalogue of several types of such houses using various kinds of materials. We are using everything possible including wood from trees blown down by wind and broken by snow, which is the least expensive material for houses.

How much? About 1,500,000 zlotys in the raw state, but this is only in the raw state! For this reason the waiting period for housing instead of becoming shorter is becoming longer. On the average the wait for housing is from 10 to 12 years. It is no consolation that this is the situation in the whole country.

There is also a shortage of housing on the state farms built for animal husbandry on a broad scale. A shortage of workers is beginning to be felt, particularly highly qualified workers. It is true that on some state farms some of the old houses are being modernized, but here again the needs exceed the possibilities. This is the Gordian knot of our agriculture and communal economy.

[Question] Now let us give fantasy the reins: one day the governor of Gorzow Province wakes up in a new situation: he has a free hand in everything, no restrictions bind him. What would you do then?

[Answer] Great heavens! I cannot even imagine such a situation, but as long as you are taking me to the land of daydreams... It is not regulations that tie my hands very much, it is the economic situation. What would I do? First, I would release enormous funds to the communal economy. Second, I would provide areas for socialized and individual building. Third, I would convene an extraordinary, operative engineering enterprise and would direct its whole potential toward construction.

[Question] And in the area of agriculture?

[Answer] You are pushing me to the wall with this agriculture! But I will answer. First I would do everything to conserve the environment, then I would regulate water use, and finally I would manage the Notec River valley. And when all this was finished, I would order a small, idyllically located rest home with a cafe and a terrace built in that valley.

[Question] With a cafe? Why?

[Answer] In order to invite you to finish this conversation over a small cup of coffee when I have finished contending with all the problems of Gorzow Province. Since we have let fantasy have the reins... What do you say to that?

[Response] I will accept the invitation gratefully. Thank you also for the interview.

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YUGOSLAVIA

KOSOVO POPULATION MOVEMENTS, EMPLOYMENT IN 1984

Emigration, Arrival

Pristina RILINDJA in Albanian 21 Mar 85 p 7

[Excerpt] According to the Kosovo Bureau of Statistics, last year 8,200 persons moved out of Kosovo, including 3,673 Serbs, 2,145 Albanians, 572 Montenegrins, 641 Moslems, and 605 Romanies. Most emigrated from Pristina, Titova Mitrovica, and Pec; and most went to Belgrade (1,733), Kraljevo (626), and the Sumadija and Pomoravlje areas (693). Most were 15-27 years of age, and 3,861 declared they left because of employment, 618 for better material conditions, 311 because of school, 1,024 because of marriage, while three persons said they left because of pressure (one each from Pristina, Urosevac, and Vitina opstina). According to the Serbian Republic Bureau of Statistics, 156 Serbs and 21 Montenegrins moved from Kosovo into Serbia during January 1985; while the Kosovo statistical bureau reported that 214 persons left Kosovo for Serbia in January.

In 1984, 2,858 persons moved into Kosovo, according to the provincial Bureau of Statistics (1,455 from Serbia (including 613 Albanians, 576 Serbs, and 56 Montenegrins), 424 from Macedonia, 274 from Croatia, 262 from Montenegro, and 200 from Bosnia-Hercegovina). Most of the new arrivals were 15-27 years of age, and of the total number of 2,858, 1,127 said they were coming to Kosovo for employment, although ... Kosovo has the highest number of unemployed in the country. It is thus clear that the reason for their coming must be sought in the area of sociopolitical relations in the SFRY, in the climate of national equality, and in the political atmosphere recently created for the benefit of the peoples and nationalities in our country.

Of the 1,425 Albanians who moved into Kosovo in 1984, 613 came from Serbia, 338 from Macedonia, and 202 from Croatia.

Also, last year 876 Serbs and Montenegrins and 1,425 Albanians were listed as "returnees."

Employment Abroad

[Editorial Report] Pristina RILINDJA in Albanian of 21 March 1985 reports on page 4 that in 1984, 31,638 persons from Kosovo were working in foreign countries; of these, 75 percent lived in the FRG, 14.4 percent in Switzerland, and 3.4 percent in Libya. Among those in Libya were 610 health specialists. The paper states that of 3,908 persons from Kosovo working in Switzerland, 97.3 percent were employed in construction and 2.7 percent in agriculture.

### Domestic Employment

[Editorial Report] Pristina RILINDJA in Albanian on page 1 of its 1 April issue reports that of the 206,500 persons employed in the socialized sector in Kosovo in 1984, 73,500 were in industry and mining, 8,300 in agriculture and fishing, 1,700 in forestry, 400 in water management, 21,600 in construction, 11,600 in communication and transportation, 18,700 in commerce, 5,300 in the tourist and hotel industry, 4,500 in the artisan sector, 3,700 in communal services, 28,300 in education and culture, 11,800 in health and social services, and 12,600 in sociopolitical organizations.

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YUGOSLAVIA

# TAX DISINCENTIVES OUTWEIGH INCENTIVES FOR PRIVATE BUSINESS

Belgrade EKONOMSKA POLITIKA in Serbo-Croatian 25 Mar 85 pp 13-14

[Excerpts] While many Yugoslav citizens are still trying to collect documents and permits for going into some kind of small business, others are closing down their shops (discouraged by numerous operating difficulties, by high costs, and little net income). Others have gotten rich already, having made use of the good market conditions for their products and services over several years, while others can hardly make ends meet and are sorry that they did not invest their money in the bank and live from the interest instead of investing in a private shop. Of course, a good number of artisans and other private business people are operating normally and earning relatively well but in constant fear of new regulations or changes in the social [opstina] climate regarding the private sector.

Discussions about the small-scale economy are still going on in our country, as if the energetic social and political views, decisions and documents--in which private work in small business has been given full recognition--had counted for nothing; because, although small business cannot be equated with the private sector, the fact is that without the development of this sector small business cannot develop, and the truth is that there are still many who advocate placing limits on the growth of private ownership of the means of production and on turnover of this production, while it seems there are also still many people who do not express their convictions out loud but rather implement them in practice by checking and hindering the faster growth of private businesses.

In discussions held in the SAWY section on socioeconomic trends and development policy the picture of small business development changed depending on who was speaking and what successes or failures were discussed. But participants agreed to quite a degree that in the final assessment development has been very modest and below the adopted policy and expectations.

The fact was brought out that in the 1981-1983 period the growth rate of production and services in small business amounted to 2.8 percent, i.e., at a time when the social production of the entire economy increased at only 0.2 percent and industrial production at 1.7 percent. The private sector in this period achieved a higher rate of growth (about 3 percent) in production and services than the socialized sector. This increase was brought about by the 15-percent

rise in the number of shops and the 21 percent-rise in the number of employees, which was the result of land, credit, and leasing policies and the more stimulative tax policy in opstinas, as well as the fact that space and funds were provided for developing new business areas and building temporary facilities.... Despite this, there are significant and numerous restrictions [to small business development].

#### Private Stores in the SFRY

|                    | <u>1980</u> | <u>1983</u> | <u>Index</u> |
|--------------------|-------------|-------------|--------------|
| Total              | 189,145     | 217,952     | 115          |
| Bosnia-Hercegovina | 28,349      | 33,659      | 119          |
| Montenegro         | 2,961       | 2,916       | 99           |
| Croatia            | 42,235      | 48,415      | 115          |
| Macedonia          | 16,365      | 17,768      | 109          |
| Slovenia           | 29,202      | 33,835      | 116          |
| Serbia             | 70,033      | 81,359      | 116          |

The primary brake placed on development of the private sector in Yugoslavia is the ideological view that it is a serious danger to the sociopolitical system of socialist self-management; this view still has many supporters, especially those who have a direct influence on policy and actions in society and the economy. The second reason [for slow development] is that representatives of "large-scale businesses still do not widely believe in the business possibilities and generally large effect of small-scale business and private workshops. We lack information about the level of technology in small-scale business," it was said in the discussion, "we know nothing concrete about their equipment, expertise of personnel, etc."

Finally, there is a very unfavorable relation by the social community toward private stores. As someone said in the discussion, "all our regulations pertaining to small business are against small business. We make it difficult for private businesses to get raw materials and producer goods for their work. If such materials exist in the country, private businesses can buy them only if any remain after "big" consumers have been satisfied. Most such materials have to be imported and private businesses have limited [import] rights and have no right at all to earn foreign exchange (regardless of whether their products or parts are exported within a larger industrial product).

Another regulation stipulates that the federal tax on alcoholic beverages for private restaurants is to be five times higher than that for the socialized sector. As a result, private hotel and restaurant owners in Slovenia have said they will probably close up after the tourist season.

Most discouraging for the private business person are the increasingly high taxes and contributions they must pay, ...in spite of all declarations, and practical efforts being made to stimulate such business. In many cases they [taxes]

choke off operations in the first years. It was said that this year taxes and contributions for private hotel and restaurant businesses in Belgrade will amount to about 90 percent of their income. In such a situation no tax benefits in the first or following 2 years of operation can help.

[The 25 March 1985 issue of PRISTINA JEDINSTVO in Albanian on page 8 reports that in Prizren 90 artisan shops closed down last year and 20 have closed in the first 2 months of this year because of "excessive tax obligations."]

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END